

Site Characterization Report

Cheyenne Airport Addition Cheyenne, Laramie County, Wyoming

October 9, 2014

Terracon Project No. 24149141



Prepared for:

Wyoming Department of Environmental Quality
Solid and Hazardous Waste Division, Orphan Site Remediation Program
Cheyenne, Wyoming

Prepared by:

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terracon.com

Terracon

Environmental

Facilities

Geotechnical

Materials

October 9, 2014

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**Re: Site Characterization Report
Cheyenne Airport Addition Orphan Project
Cheyenne, Laramie County, Wyoming
DEQ PS-0679; Terracon Project No. 24149141**

Dear Ms. Bargsten:

Terracon Consultants, Inc. (Terracon) is pleased to submit one copy of the Site Characterization Report (SCR) for the above referenced site. This investigation was performed in general accordance with the following:

- Terracon's Services Contract between Wyoming Department of Environmental Quality (WDEQ) and Terracon dated May 23, 2014.
- DEQ Task Order 002-05SC020570583 between WDEQ and Terracon dated August 11, 2014.

We appreciate the opportunity to be of service to you on this project. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
Terracon Consultants, Inc.

Michael T. Jordan, P.G.
Senior Geologist



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**SITE CHARACTERIZATION REPORT
CHEYENNE AIRPORT ADDITION ORPHAN PROJECT
CHEYENNE, LARAMIE COUNTY, WYOMING**

**Project No. 24149141
October 9, 2014**

1.0 INTRODUCTION

1.1 Site Description

The Cheyenne Airport Addition (Site) is located at 112 East 8th Avenue in Cheyenne, Wyoming and is bordered on the south by East 8th Avenue, to the west by Central Avenue, and to the east by Warren Avenue. A site location diagram is shown on Figure 1 and a site layout is shown on Figure 2 included in Appendix A. The Site is regulated and managed by the Wyoming Department of Environmental Quality, Solid and Hazardous Waste Division, Orphan Site Remediation Program (WDEQ-OSRP).

The Site is currently occupied by United Blood Services for use as a blood bank.

1.2 Site Operational History

The site was reportedly used as the original hangar for the Cheyenne airport and was subsequently used by United Airlines for aircraft maintenance until 1947. The site remained vacant from 1994 until the current building was constructed prior to 2005. Three groundwater monitoring wells were reportedly installed at the site in 1994.

1.3 Site Investigation History

A limited site investigation was reportedly conducted in 1994. The investigation reported groundwater impacts by chlorinated solvents and petroleum compounds. Based on previous investigations at the site, subsurface soils consisted of excavation fill underlain by well sorted sand with gravel to 13 feet below ground surface (bgs) and highly weathered sandstone, claystone, and siltstone bedrock to boring termination at 22 feet bgs. Depth to groundwater at the site was reported at approximately 13 to 16 feet bgs and the estimated flow of shallow groundwater is to the southeast.

The potential presence and extent of on-site impacts was not delineated. Groundwater sampling reported relatively low concentrations of chlorinated ethenes and petroleum compounds in shallow groundwater. Petroleum compounds were consistent with those contained in gasoline and jet fuel. WDEQ previously sampled a private irrigation supply well located two blocks down-gradient of the site. The irrigation well sample contained chlorinated solvent impacts. Depth of contamination has been reported to the extent of the depths investigated to date.

1.4 Site Regulatory Status

Results of the 1994 investigation were reported to the WDEQ. The site is currently managed in the Orphan Sites section of the Voluntary Remediation Program within the Solid and Hazardous Waste Division (SHWD).

1.5 Objectives and Scope of Work

The overall purpose of this project was to delineate site soil and groundwater contamination, evaluate the potential for vapor intrusion, and allow for future development of remedial alternatives. Based on the results of the investigation, a conceptual site model (CSM) defining the extent and nature of subsurface impacts was developed.

The investigation was completed in general accordance with the Work Plan dated July 9, 2014 and included the following:

- 19 soil borings
- 10 temporary wells
- Six new monitoring wells
- Three soil vapor points

1.6 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal.

1.7 Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this investigation. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

Site Characterization Report

Cheyenne Airport Addition Orphan Project ■ Cheyenne, Wyoming

October 9, 2014 ■ Terracon Project No. 24149141



This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted industry practices. No warranties, either expressed or implied, are intended or made.

The analysis and recommendations presented in this report are based upon the data obtained during our investigation and from other information discussed in this report. This report does not reflect variations that may occur in areas inaccessible to our equipment, across the site, or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after direct exploration.

2.0 SITE AND SITE SETTING

The Site is located at 112 East 8th Avenue in Cheyenne, Wyoming. The project investigation area included multiple properties in the vicinity of the Site including the following:

Record Number	Property Address	Property Owner Name	Current Tenant/Use
1	Lions Park	City of Cheyenne	Lions Park
2	4014 Central Avenue	Theotokos LLC ET AL	Daylight Donuts
3	4013 Central Avenue	Charles E Sands and Son LLC	Sands Auto Parts
4	109 East 8 th Avenue	Smith, Ronald and Wanda	Multi-Use Commercial
5	111 East 8 th Avenue	Charles E Sands and Son LLC	Yeoman Electronics
6	100 East 7 th Avenue	Warren Federal Credit Union	Parking Lot
7	215 East 8 th Avenue, 420 & 4000 House Avenue	Wyoming Medical Services Inc.	Wyoming Medical Services
8	124, 200 & 202 East 8 th Avenue	Cheyenne Airport Board	Airport Property

A site layout with Record Numbers is shown on Figure 2 in Appendix A.

3.0 KNOWN AND POTENTIAL SOURCES OF OFF-SITE IMPACTS

Based on a review of historic Sanborn maps, the following appears on the site and vicinity:

Year	112 East 8 th Avenue	Remainder of Block
1947	United Airlines Hanger	Ancillary airport structures
1953	Similar to 1947	Similar to 1947
1960	Similar to 1947	Similar to 1947
1976	Similar to 1947	Similar to 1947
1980	Similar to 1947	Similar to 1947
1994	Reconfigured as a landscaped traffic island	Bordered by Central Avenue to the west, Warren Avenue to the east, and East 8 th Avenue to the south. Ancillary airport structures.
2004	Similar to 1994	Similar to 1994
2012	The current building occupied by United Blood Bank	Similar to 1994

Based on a review of historic Sanborn maps an aircraft maintenance hangar was located at the site until at least 1980. The site was reconfigured prior to 1994 and remained a landscaped traffic island until at least 2004.

4.0 SITE ASSESSMENT METHODS

Terracon conducted a site assessment program during July and August 2014 to delineate the extent of soil and groundwater impacts as well as evaluate current soil vapor conditions. A summary of the investigation methods and techniques is provided below. Additional details are provided in the Work Plan. Sample locations are depicted on Figure 2 and concentration data is presented on Figures 3 through 7 in Appendix A.

4.1 Subgrade Utility Location

Prior to intrusive assessment activities, a request was submitted to the underground public utility locator, One Call of Wyoming, to arrange for location of underground public utilities.

4.2 Soil Borings

Terracon advanced 19 soil borings with an 8040 Geoprobe® direct push technology (DPT) drill rig. Soil boring locations are shown on Figure 2 in Appendix A. Borings included:

- 10 soil borings were advanced via DPT drilling techniques (TW-1 through TW-10) to depths of 19 to 24 feet bgs for the purpose of temporary well installation
- Six borings (MW-4 through MW-9) were advanced with 4.25-inch hollow stem augers (HSA) to depths of 19 feet bgs for the purpose of permanent well installation
- Three borings were advanced via DPT drilling techniques to depths of 12 feet bgs for the purpose of soil vapor point installation (VP-1 through VP-3)

Continuous soil samples were obtained from DPT borings via Macro-Core® samplers and from hand auger borings. Soil samples from the HSA borings were collected using split spoon samplers at five foot intervals. Soil samples were observed to document soil lithology, color and sensory evidence of impairment. The soil samples were field-screened using a MiniRAE photoionization detector (PID) with an 11.7 millivolt lamp to evaluate for the presence of volatile organic compounds (VOCs).

One soil sample from each boring that exhibited the highest PID reading or was deemed most likely to be impacted based on its relative depth and field observations was collected for analysis. Samples were placed directly into a laboratory prepared container and placed on ice in a cooler. The sample coolers and completed chain-of-custody forms were relinquished to ChemSolutions.

Drilling equipment was cleaned using a high-pressure washer prior to beginning the project and between each boring. Non-dedicated sampling equipment was cleaned using an Alconox® detergent wash and potable water rinse prior to commencement of the project and between collection of each sample. Soil cuttings and decontamination water generated during the field activities were placed in Department of Transportation (DOT) approved, 55-gallon steel drums, closed and appropriately labeled with project-specific information and initial accumulation date.

4.3 Groundwater Monitoring Wells

Terracon installed 10 temporary monitoring wells to assist in the delineation of shallow groundwater impacts. Temporary well locations are shown on Figure 2 in Appendix A. Temporary wells were constructed in boreholes advanced via DPT drilling techniques using the following procedures:

- Installation of 10 feet of 1-inch diameter 0.010-inch machine slotted PVC well screen with a threaded bottom cap
- Installation of 1-inch diameter, threaded, flush joint PVC riser pipe to the land surface
- Addition of a pre-sieved annular silica sand pack from the bottom of the boring to approximately 2 feet above the top of the well screen
- Addition of 2 feet of hydrated bentonite seal above the sand pack filter zone

Following the collection of groundwater samples, temporary wells were abandoned by removing the top section of PVC pipe, then backfilling the well with bentonite chips.

Terracon installed six permanent monitoring wells for the purpose of estimating the groundwater flow direction and evaluating groundwater quality. Permanent well locations are shown on Figure 2 in Appendix A. Permanent wells were installed in boreholes advanced via hollow-stem auger drilling techniques using the following procedures:

- Installation of 11 to 16 feet of 2-inch diameter 0.010-inch machine slotted PVC well screen with a threaded bottom cap
- Installation of 2-inch diameter, threaded, flush joint PVC riser pipe to the surface
- Addition of a pre-sieved annular silica sand pack from the bottom of the boring to approximately 2 feet above the top of the well screen
- Addition of 2 feet of hydrated bentonite seal above the sand pack filter zone
- Installation of an 8-inch diameter, circular, bolt-down, steel, monitoring well cover with locking well cap inset in a flush-mount, concrete well pad

Monitoring wells were developed in general accordance with VRP Fact Sheet #29 and a minimum of 48 hours after well installation. The monitoring wells were developed on July 21 and 22, 2014 by surging and removing groundwater with a new, disposable, polypropylene bailer. Groundwater sampling activities were conducted a minimum of 24 hours after well development activities were completed at each permanent monitoring well.

4.4 Groundwater Gauging and Sampling

Groundwater samples were collected by Terracon from existing wells, temporary wells, and newly installed permanent wells.

One groundwater sample was collected from each temporary monitoring well on July 17, 2014. Groundwater samples were collected using low-flow groundwater sampling methods.

One groundwater sample was collected and analyzed from monitoring wells MW-1, MW-2, and MW-4 through MW-9 from July 14 to July 31, 2014 including blind duplicate groundwater samples. Additional grab samples from monitoring wells MW-2, MW-4, and MW-5 were collected at the request of WDEQ immediately subsequent to drilling on July 17 and July 18, 2014.

A summary of the groundwater field parameter measurements are shown on Table 3 in Appendix B. Monitoring well sampling occurred after the water quality parameters stabilized, when three consecutive reading collected 3-5 minutes apart were within:

- $\pm 3\%$ for temperature (minimum of 0.2° C)
- ± 0.1 for pH
- $\pm 3\%$ for specific electrical conductance
- ± 10 mv for redox potential (ORP)
- $\pm 10\%$ for dissolved oxygen (DO)
- $\pm 10\%$ for turbidity if > 10 nephelometric turbidity units

A summary of the top of casing elevation measurements and depth to groundwater measurements are shown on Table 4 in Appendix B, and a groundwater piezometric map for groundwater elevation measurements collected on September 9, 2014 is presented on

Figure 3 in Appendix A.

Groundwater samples were collected and placed in laboratory prepared containers and placed on ice in a cooler. Groundwater samples were analyzed for VOCs via EPA method 8260. Additionally, monitoring wells MW-1, MW-2, and MW-4 through MW-9 were analyzed for the following select natural attenuation parameters:

- methane, ethane, and ethene via RSK 175
- dissolved iron and total iron via SM 3500 and EPA method 6010
- nitrate and nitrite via EPA method 300
- sulfate and sulfite via EPA method 300 and SM 4500
- total organic carbon via EPA Method 9060

The sample coolers and completed chain-of-custody forms were relinquished to ChemSolutions for analysis.

4.5 Soil Vapor Points

Soil vapor samples were collected from soil vapor wells (VP-1 through VP-3) on August 1, 2014. Sample locations are shown on Figure 2 in Appendix A.

Soil vapor points were constructed in boreholes advanced via hand auger. The points were constructed with 40-micron polyethylene screens approximately one-half inch in diameter and approximately six-inches in length. The screens were connected to one-quarter inch diameter Teflon®-lined sample tubing via a barb fitting. Sand was placed around and extended above the screen followed by a layer of dry, granular No. 20 size bentonite pellets. Bentonite hydrated with distilled water extended from the dry bentonite to six-inches below the ground surface. The remaining annulus was completed with cement grout and a Swagelok® connection fitting attached to the end of the tubing.

Prior to sampling, a helium tracer gas leak test was conducted to verify the integrity of the vapor point seal. A field instrument was used to verify the presence and concentration of helium tracer gas. A shroud was placed over the vapor point head and saturated with helium. The point was purged using a PID and then screened for helium after each vapor point volume to assess for leaks in the well seal. Helium concentrations in the sample tubing were less than 10 percent of those measured in the shroud and the seals were considered to be sufficient.

A laboratory supplied, batch certified 1.0-liter Summa canister was connected to tubing using Swagelok® fittings at each soil vapor point. Each sample canister was filled using a dedicated flow controller and set to a sample rate of less than or equal to 25 milliliters per minute. An in-line vacuum gauge was connected to the sample controller to verify initial vacuum levels within the canister and as an indicator that final equalization was reached (i.e. sampling was complete).

4.6 Site Survey

Each sample location was surveyed by Steil Surveying Services on August 25, 2014. Locations for monitoring wells were surveyed for horizontal location in latitude and longitude coordinates to six decimal degrees of accuracy. The survey included a vertical survey to 0.01 feet relative to mean sea level. Survey results are presented in Table 1 of Appendix A.

4.7 Investigative Derived Waste

Soil cuttings, groundwater water, and decontamination water were containerized in 55-gallon DOT approved steel drums, closed, and appropriately labeled with project-specific information and initial accumulation date. The drums were placed on the south side of the United Blood Services building for temporary storage until scheduled for disposal off-site. Three point composite samples were collected from each drum for characterization and disposal. A summary of the samples is included in Table 9 in Appendix B and the laboratory reports are included in Appendix D.

5.0 SITE INVESTIGATION RESULTS

5.1 Site Soils and Hydrogeology

Detailed lithologic descriptions are presented on the soil boring logs included in Appendix C. The general soil lithology encountered during sample collection consisted of unconsolidated silty sand and sandy clay.

Field evidence of potential soil contamination was observed in the following soil samples, with PID readings greater than 10 parts per million (ppm):

- TW-1 – up to 940 ppm at 15-20 feet bgs
- TW-8 – up to 404.1 ppm at 14-19 feet bgs
- VP-2 – up to 70.6 ppm at 0-4 feet bgs
- VP-3 – up to 16.3 ppm at 4-9 feet bgs

A summary of the highest PID readings in each boring are shown on Table 2 in Appendix B.

Saturated soils were encountered in the borings at approximately 10 to 16 feet bgs. The surficial water table was estimated during the initial advancement of soil borings based on visual observations of soil cuttings. Water-level measurements were collected from the on-site and off-site wells from July 14 to July 24, 2014 and a complete round of gauging was conducted on September 9, 2014. The depth-to-water measurements and the converted relative water-level elevations are presented in Table 4 and a piezometric surface map on Figure 3.

Based on the information presented on Figure 3, shallow groundwater is estimated to flow south-southeast and generally follows the land surface topography. The horizontal hydraulic gradient in the surficial aquifer was estimated to be 0.015 feet per foot (ft/ft) (between MW-1 and MW-4).

5.2 Soil Sample Analytical Results

Soil sample results were compared to the WDEQ-VRP Cleanup Level Look-up Table dated December 2013. As discussed in WDEQ-VRP Fact Sheet #12, the reporting limit may be used as the screening level for constituents with cleanup values less than the method detection limit. Guidance values for migration to groundwater standard were used for comparative purposes. A summary of the soil analytical results for VOCs is presented on Table 5 in Appendix B.

PCE was detected in soil sample (VP-3) at a concentration of 6.3 micrograms per kilogram ($\mu\text{g}/\text{kg}$). The PCE concentration was below the WDEQ residential clean-up standard (22,000 $\mu\text{g}/\text{kg}$), but exceeded the WDEQ migration to groundwater standard (2.1 $\mu\text{g}/\text{kg}$).

PCE degradation products (TCE, cis-1,2-DCE, and vinyl chloride) were not detected in soil samples.

5.3 Identified Areas with Impacted Soil

Based on July 2014 soil results, minor soil impacts were observed at boring VP-3, located north of the existing United Blood Services building.

5.4 Groundwater Field Parameters

Field parameters, including temperature, DO, pH, conductivity, ORP, and turbidity were recorded during permanent well purging. Results are included on Table 3 and summarized below:

- temperature ranged from approximately 12.6 to 17.4 degrees Celsius
- dissolved oxygen ranged from 1.50 to 8.55 milligrams per liter (mg/L)
- pH values ranged from 6.83 to 7.06 standard units
- conductivity was measured between 1.59 and 183.3 microSiemens per centimeter ($\mu\text{S}/\text{cm}$)
- oxidation reduction potential was between 165.3 and 251.7 millivolts (mV)
- turbidity was measured between 5.79 and 179 NTUs

Aquifer conditions were generally aerobic and oxidative with average dissolved oxygen concentrations of 6.59 mg/L and ORP average of 188.7 mV.

5.5 Groundwater Analytical Results

Groundwater sample results were compared to the WDEQ-VRP Cleanup Level Look-up Table dated December 2013. A summary of the groundwater analytical results are

presented on Table 6 in Appendix B. Groundwater analytical results from temporary wells were used to select the placement of permanent wells. Data from permanent wells were used to compare with historical results (MW-1 and MW-2) and evaluate concentration trends.

Groundwater results from temporary and permanent wells indicate that groundwater impacts are located on the western edge of the property. The detections of chlorinated solvents in MW-5 south of East 8th Avenue and in TW-8 east side of Warren Avenue indicate that impacts extend off-site. The absence of VOCs above laboratory reporting limits in MW-7, TW-10, and MW-4 defines the southern, downgradient extent of shallow groundwater impacts.

A summary of detected compounds is presented below:

- PCE was detected in 3 wells at concentrations from 1.4 J to 70 µg/L
- TCE was detected in 3 wells at concentrations from 1.1 J to 4.5 µg/L
- 1,1-dichloroethene (DCE) was detected in 1 well at a concentration of 16.6 µg/L

Isoconcentration maps for PCE and TCE are provided as Figures 5 and 6, respectively.

Existing wells MW-1 through MW-2 were sampled in 1994. PCE concentrations observed in MW-1 were slightly lower than those observed in 1994 and concentrations were non-detect in MW-2 during past and current sampling events. The decline in concentrations provides limited evidence that the plume may be reducing in concentration via natural attenuation.

5.6 Soil Vapor Results

Soil vapor sample results were compared to the WDEQ residential deep soil vapor screening levels. A summary of the soil vapor analytical results are presented on Table 7 in Appendix B.

PCE was detected in VP-3 and TCE was detected in VP-1 at concentrations that exceed their respective WDEQ residential soil vapor screening level. A summary of select site specific compounds is presented below:

- PCE was detected in 3 soil vapor samples at concentrations ranging from 140 µg/m³ to 4,600 µg/m³
- TCE was detected in 3 soil vapor samples at concentrations ranging from 36 µg/m³ to 100 µg/m³

The highest PCE concentration was observed in VP-3, which coincides with the only location that contained detectable VOC concentrations in soil.

6.0 INDICATORS OF DEGRADATION

Geochemical parameters were included in the analytical program for groundwater to evaluate if conditions are favorable for reductive-dechlorination reactions and to verify the presence of daughter products from reductive-dechlorination reactions. The following sections briefly discuss reductive-dechlorination reactions and trends in chemical data.

6.1 Overview of Reductive-Dechlorination Reactions

The primary dissolved groundwater constituents at this site are solvents containing chlorinated hydrocarbons (i.e., PCE and its daughter products). Under anaerobic conditions, it is possible to convert chlorinated hydrocarbons to less toxic byproducts through the microbially mediated process of reductive dechlorination. Reductive dechlorination is a biochemical process in which microorganisms biodegrade chlorinated compounds by selectively removing chloride ions. This process occurs as microorganisms metabolize available carbon sources. As the microorganisms metabolize carbon (in the absence of DO), a side reaction is facilitated, whereby a chloride ion is removed from the chlorinated hydrocarbon and replaced with a hydrogen atom. Metabolic processes facilitating this reaction result in the loss of electrons from the carbon source. For the microorganisms to successfully metabolize a carbon source, a separate chemical species must be present to accept the electrons. Either a naturally occurring biogeochemical parameter (e.g., nitrate, ferric iron, and sulfate) or the chlorinated hydrocarbon becomes the electron acceptor during reductive dechlorination.

Dissolved Oxygen (DO)

DO concentrations were measured in each of the monitor wells in order to determine if anaerobic conditions, which are conducive to reductive dechlorination, were present in the aquifer. Generally, DO concentrations above 1.0 mg/L are considered to be indicative of aerobic conditions, and DO concentrations below 1.0 mg/L are considered to be indicative of anaerobic conditions. Under anaerobic conditions, chlorinated hydrocarbons (i.e., PCE and TCE) can be degraded by the microbial-mediated process of reductive dechlorination. When DO is sufficiently diminished in the aquifer, other electron acceptors (i.e., nitrate, ferrous iron, sulfate) are used by microorganisms to facilitate reductive dechlorination reactions.

The DO concentrations recorded during the sampling event indicate that aerobic conditions generally exist beneath the site.

Oxidation-Reduction Potential (ORP)

ORP is an indicator of electron activity in the groundwater and infers the tendency of ions to transfer electrons. ORP reactions in groundwater containing organic compounds are usually catalyzed by microorganisms and may be either naturally or artificially induced. Therefore, the ORP level of the groundwater system indicates the types of biological

reactions that may occur in the system. ORP levels below 50 mV are necessary to allow reductive-dechlorination reactions to occur; however, optimal levels are -100 mV or lower.

Optimal ORP values were not observed at the site.

6.1.1 Presence of Reductive-Dechlorination Daughter Products

The reductive-dechlorination process creates daughter compounds (e.g., TCE, cis 1,2 DCE, and vinyl chloride) for which the samples were analyzed during the groundwater monitoring events. TCE was detected in 3 monitoring wells; however, none of the wells in which TCE was detected also contained PCE. Cis 1,2 DCE and Vinyl Chloride were not detected in any groundwater samples.

In the reductive-dechlorination process, PCE should degrade to daughter and end products by following the reaction sequence of PCE, TCE, cis-1,2-DCE, vinyl chloride, ethene, ethane, and methane. Ethene, ethane, and methane were not detected above laboratory detection limits.

The presence of daughter products in the wells is evidence that a limited amount of reductive dechlorination is likely occurring at the site, but a limited historical data set and the absence of PCE in groundwater samples that contained degradation compounds makes it difficult to establish a corollary relationship and definitive trends.

6.1.2 Competing Electron Receptors

Nitrate and Nitrite

Once the available DO is diminished, microorganisms will turn to nitrate for the energy needed to metabolize carbon sources because nitrate is the most thermodynamically favorable energy source after oxygen. During the biologically mediated process of denitrification, nitrate is reduced to nitrogen gas or to organic nitrogen compounds. During the initial step of nitrate reduction, nitrate is reduced to nitrite as oxygen is stripped and electrons are transferred. Therefore, depressed nitrate levels, as well as intermediate products such as nitrite, serve as indicators of an anaerobic environment.

Nitrate was detected in each well at concentrations between 1.38 mg/L and 5.21 mg/L. Nitrite was not detected in any groundwater samples.

Total and Dissolved Iron

Following denitrification, the most thermodynamically favorable reaction for microorganisms to obtain energy is the reduction of ferric iron (Fe^{3+}) to ferrous iron (Fe^{2+}). An increased concentration of ferrous iron is indicative of iron-reducing bacteria reducing ferric iron to ferrous iron to metabolize a carbon source.

Total iron was detected above laboratory detection limits in each well at concentrations from 1,020 to 61,900 µg/L. The elevated iron concentrations in some wells (e.g. MW-6) may be attributed to high turbidity of the sample. Dissolved iron was not detected in any groundwater samples. The lack of Fe²⁺ detections relative to the total iron concentrations provides evidence that iron may be a competing electron acceptor.

Sulfate and Sulfide

When more thermodynamically favorable electron acceptors such as nitrate and ferric iron become diminished, sulfate-reducing microorganisms (if present) may mediate the electron transfer process. The process of reducing sulfate to sulfide is known as sulfanogenesis. Typically, depressed sulfate concentrations within the source area indicate that sulfanogenesis is occurring. Increased concentrations of sulfide are expected where sulfate reduction is occurring, though sulfide will preferentially precipitate with available dissolved metals (e.g., ferrous iron) before accumulating in groundwater.

Sulfate was detected in each well at concentrations between 23.5 and 102 mg/L. Sulfide was not detected above reporting limits. It is possible that sulfide may be precipitating with available dissolved metals (e.g., ferrous iron) and is not accumulating in the groundwater.

7.0 PRELIMINARY SITE CONCEPTUAL MODEL

The investigation results confirmed limited impacts to soil, groundwater, and soil vapor in the vicinity of the site. Impacts appear to originate from either off-site or at the northern portion of the site. The highest soil vapor PCE concentrations were observed in VP-3 north of the existing United Blood Services building, which coincides with the only location where PCE was detected in soil. Soils generally consisted of silty sand and sandy clay. A Site Conceptual Model is included as Figure 8 and a Site Conceptual Model Flow Chart is included as Figure 9 in Appendix A.

Groundwater was encountered at approximately 10 to 16 ft bgs and is estimated to flow south-southeast at a gradient of approximately 0.015 ft/ft. Groundwater was impacted by PCE and its degradation products with the highest concentrations being observed west of the United Blood Services building (MW-2). The dissolved phase groundwater plume appears very limited in extent and extends downgradient a distance of less than 200 feet and is less than 50 feet in width. Unfavorable biochemical conditions coupled with the absence of widespread daughter compounds supports the idea that degradation is limited.

Soil and groundwater impacts are contributing to soil vapor impacts. The area with highest impacts was observed immediately adjacent north of the building (VP-3).

8.0 FINDINGS AND RECOMMENDATIONS

The findings of this SCR are as follows:

- Concentrations of PCE in soil and groundwater were reported above its clean-up levels under the WDEQ-VRP Cleanup Level Look-up Table dated December 2013.
- PCE and TCE concentrations in deep soil vapor samples were reported above their respective action levels.

The recommendations of this SCR are as follows:

- Based on available data, additional investigations of groundwater and soil are not warranted at this time. Further investigations to better quantify the risk of vapor intrusion to the on-site building are recommended.
- Prepare a remedial alternatives report to identify and evaluate appropriate remedies for impacted shallow groundwater.

APPENDIX A

Figure 1 – Site Location Diagram

Figure 2 – Site Diagram

Figure 3 – Piezometric Surface Diagram (Sept. 9, 2014)

Figure 4 – Soil Analytical Diagram

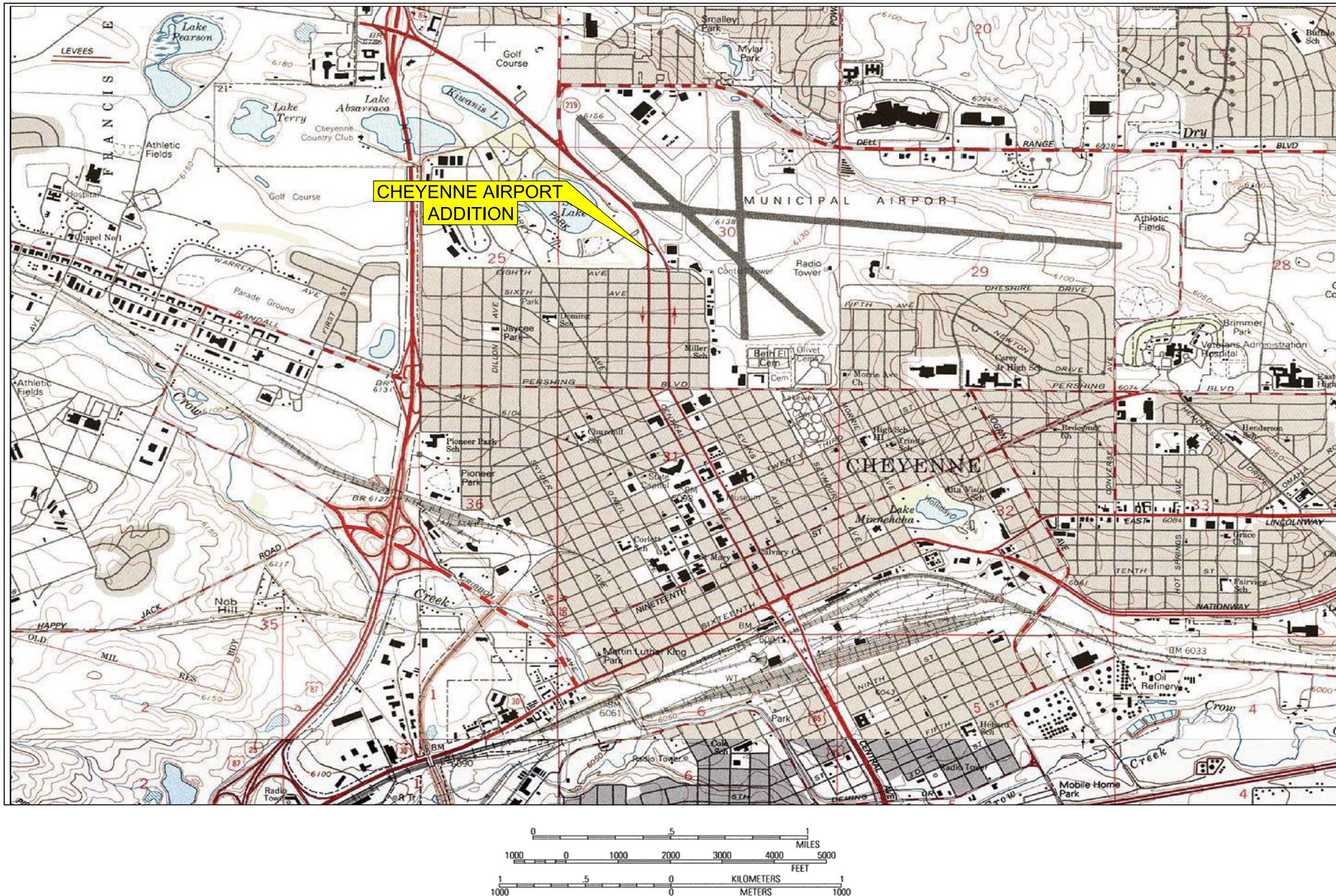
Figure 5 – Groundwater Isoconcentration Diagram (PCE)

Figure 6 – Groundwater Isoconcentration Diagram (TCE)

Figure 7 – Soil Vapor Analytical Diagram

Figure 8 – Site Conceptual Model

Figure 9 – Site Conceptual Model Flow Chart



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FIGURE 1 - SITE LOCATION DIAGRAM

CHEYENNE AIRPORT ADDITION

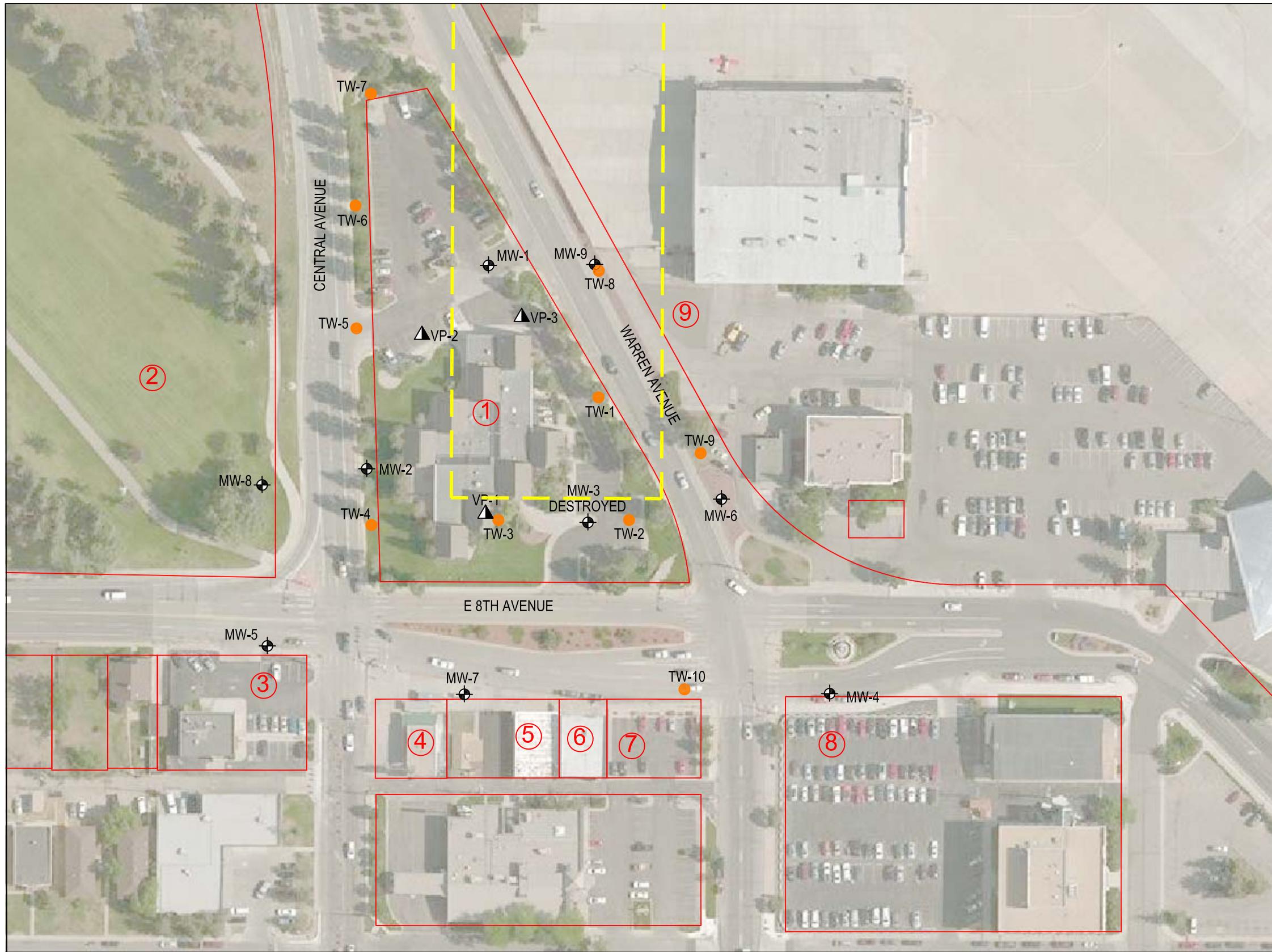
112 EAST 8TH AVENUE
CHEYENNE, WYOMING

N:\Projects\2014\20149141\Working Files\DRAFTS (Proposal-Reports-Communications)\Airport\CAD\24149141-1.dwg

FIGURE #1

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APPVD. BY:	JAS
SCALE:	1:24,000
DATE:	7/7/14
JOB NO.	20147141
ACAD NO.	001
SHEET NO.:	1 OF

CHEYENNE AIRPORT
ADDITION



- LEGEND
- APPROXIMATE LOCATION OF MONITORING WELL
 - ▲ - APPROXIMATE LOCATION OF SOIL VAPOR POINT
 - - APPROXIMATE LOCATION OF TEMPORARY MONITORING WELL
 - ② - PROPERTY OWNER
 - APPROXIMATE PROPERTY LINES
 - APPROXIMATE LOCATION OF FORMER HANGER BUILDING

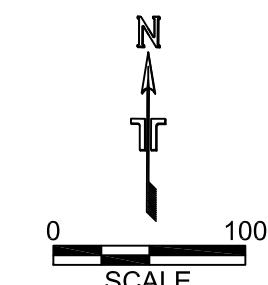


FIGURE 2 - SITE DIAGRAM

CHEYENNE AIRPORT ADDITION
112 EAST 8TH AVENUE
CHEYENNE, WYOMING

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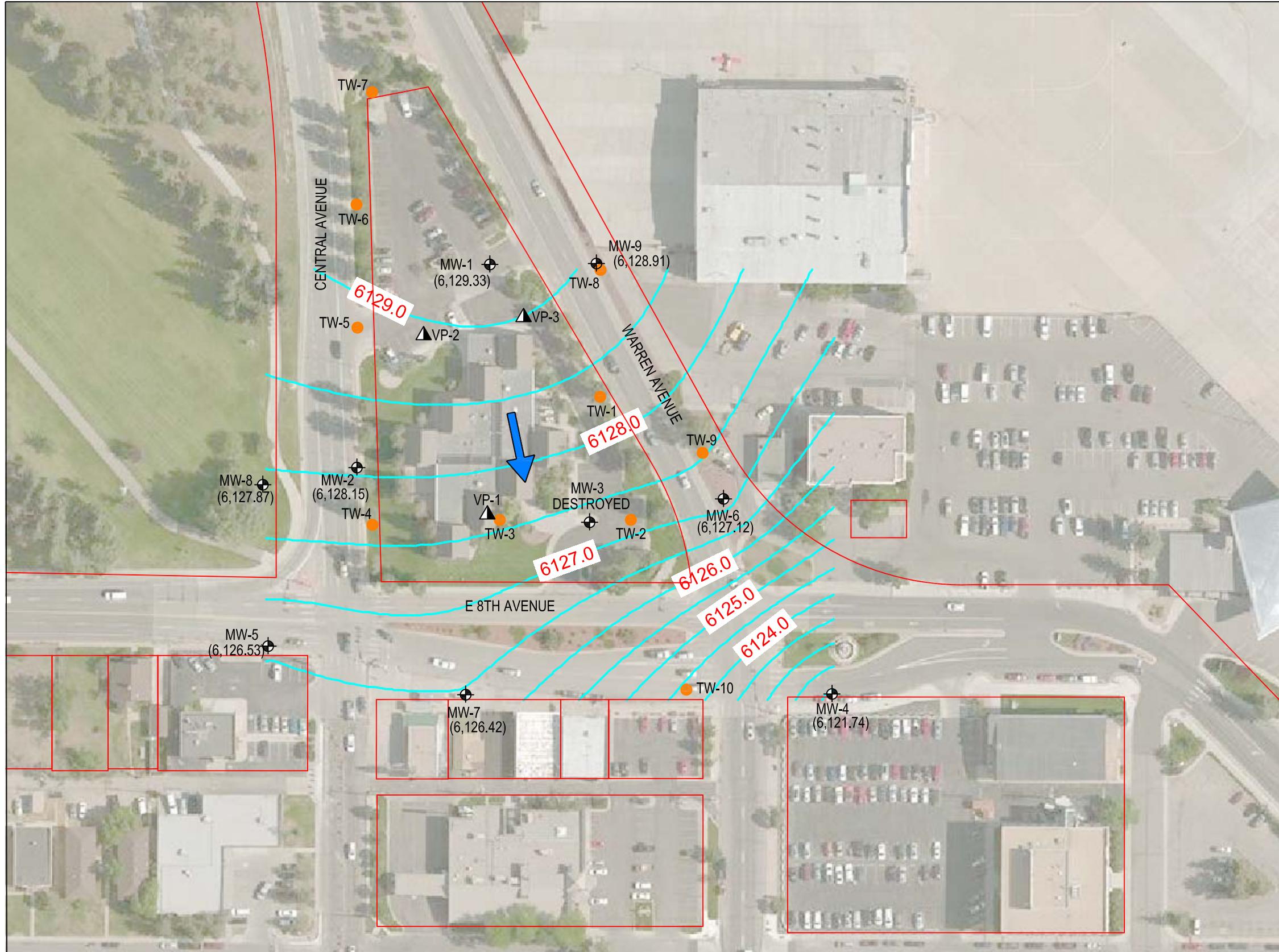
Cheyenne, Wyoming 82001
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FIGURE #2

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SCALE:	1' = 100'
DATE:	7/7/14
JOB NO.	24147141
ACAD NO.	002
SHEET NO.:	2 OF 9

CHEYENNE AIRPORT
ADDITION



- LEGEND
- APPROXIMATE LOCATION OF MONITORING WELL
 - ▲ - APPROXIMATE LOCATION OF SOIL VAPOR POINT
 - - APPROXIMATE LOCATION OF TEMPORARY MONITORING WELL
 - ← - ESTIMATED GROUNDWATER FLOW DIRECTION
 - APPROXIMATE PROPERTY LINES
 - 6127.5 - ESTIMATED GROUNDWATER ELEVATION ABOVE MEAN SEA LEVEL

NOTE:
GROUNDWATER CONTOURS WERE ESTIMATED
USING THE "SURFER" PROGRAM FROM GOLDEN
SOFTWARE BASED ON DATA COLLECTED IN
SEPTEMBER 2014, ACTUAL CONDITIONS MAY
VARY.

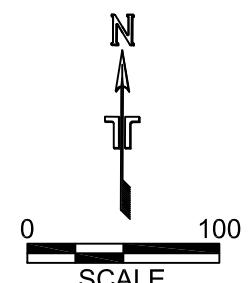


FIGURE 3 - PIEZOMETRIC SURFACE DIAGRAM (SEPT. 9, 2014)

CHEYENNE AIRPORT ADDITION
112 EAST 8TH AVENUE
CHEYENNE, WYOMING

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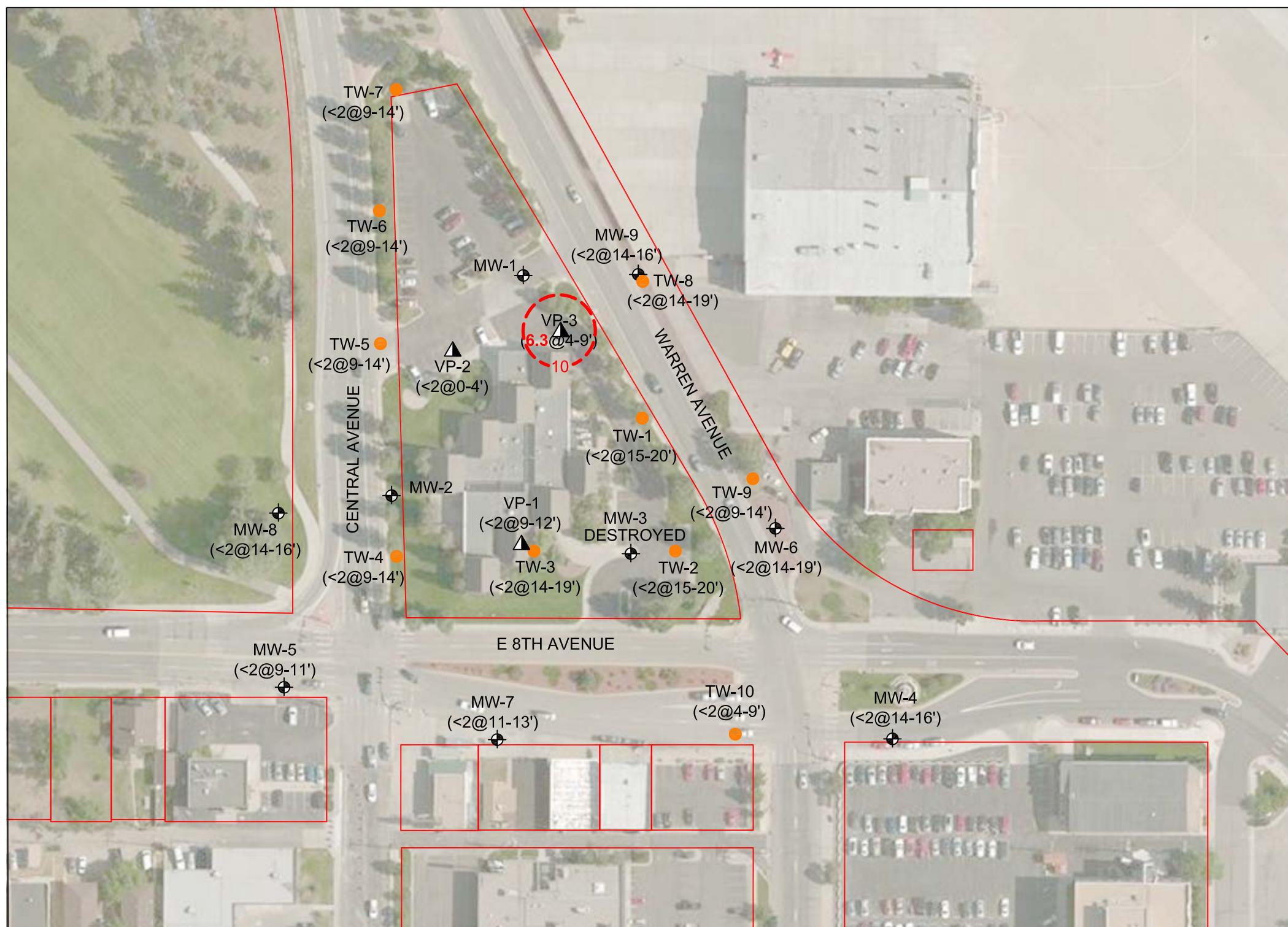
1505 Old Happy Jack Road
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FIGURE #3

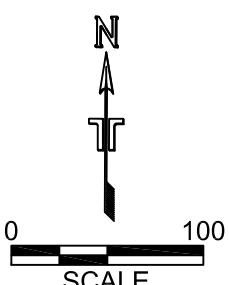
DESIGNED BY:	JAS
DRAWN BY:	JAS
APPVD. BY:	JAS
SCALE:	1' = 100'
DATE:	9/12/14
JOB NO.	24147141
ACAD NO.	003
SHEET NO.:	3 OF 9

CHEYENNE AIRPORT
ADDITION



LEGEND

- APPROXIMATE LOCATION OF MONITORING WELL
- APPROXIMATE LOCATION OF SOIL VAPOR POINT
- APPROXIMATE LOCATION OF TEMPORARY MONITORING WELL
- APPROXIMATE PROPERTY LINES
- ($<2@9-11'$) - PCE CONCENTRATION ($\mu\text{g}/\text{Kg}$) COLLECTED AT 9 TO 11 FEET BELOW GROUND SURFACE
- ($\mu\text{g}/\text{Kg}$) - MICROGRAMS PER LITER
- (2.1) - INDICATES AN EXCEEDENCE OF THE WDEQ SOIL CLEANUP LEVEL, MIGRATION TO GROUNDWATER, FACT SHEET #12.
- 10 - TETRACHLOROETHENE (PCE), APPROXIMATE ISOCONCENTRATION, MAY 2014 ($\mu\text{g}/\text{Kg}$)



CHEYENNE AIRPORT
ADDITION

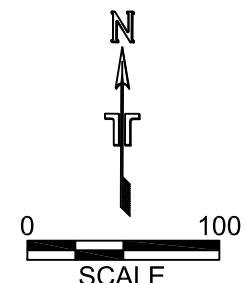
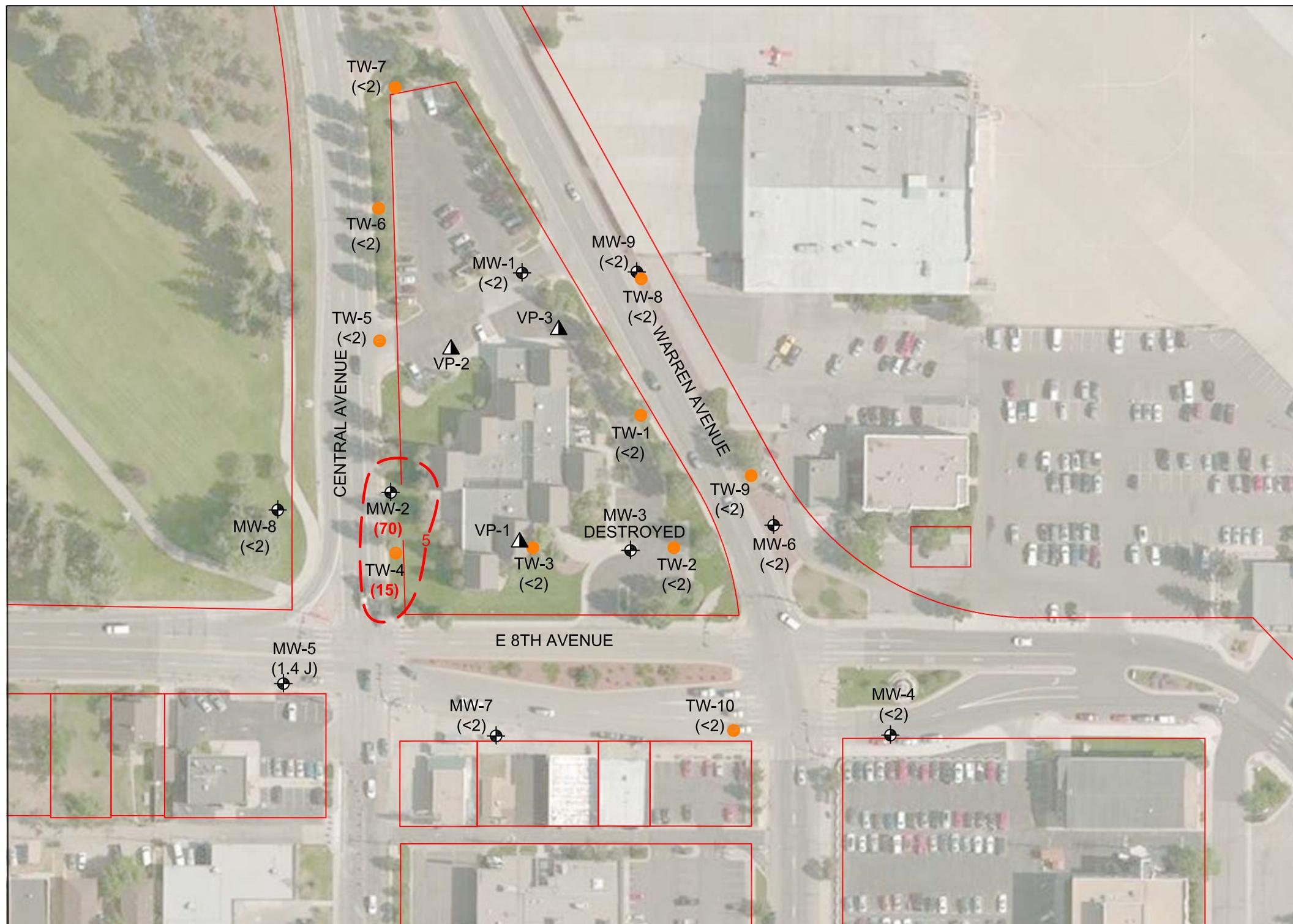


FIGURE 5 - GROUNDWATER ISOCONCENTRATION DIAGRAM (PCE)

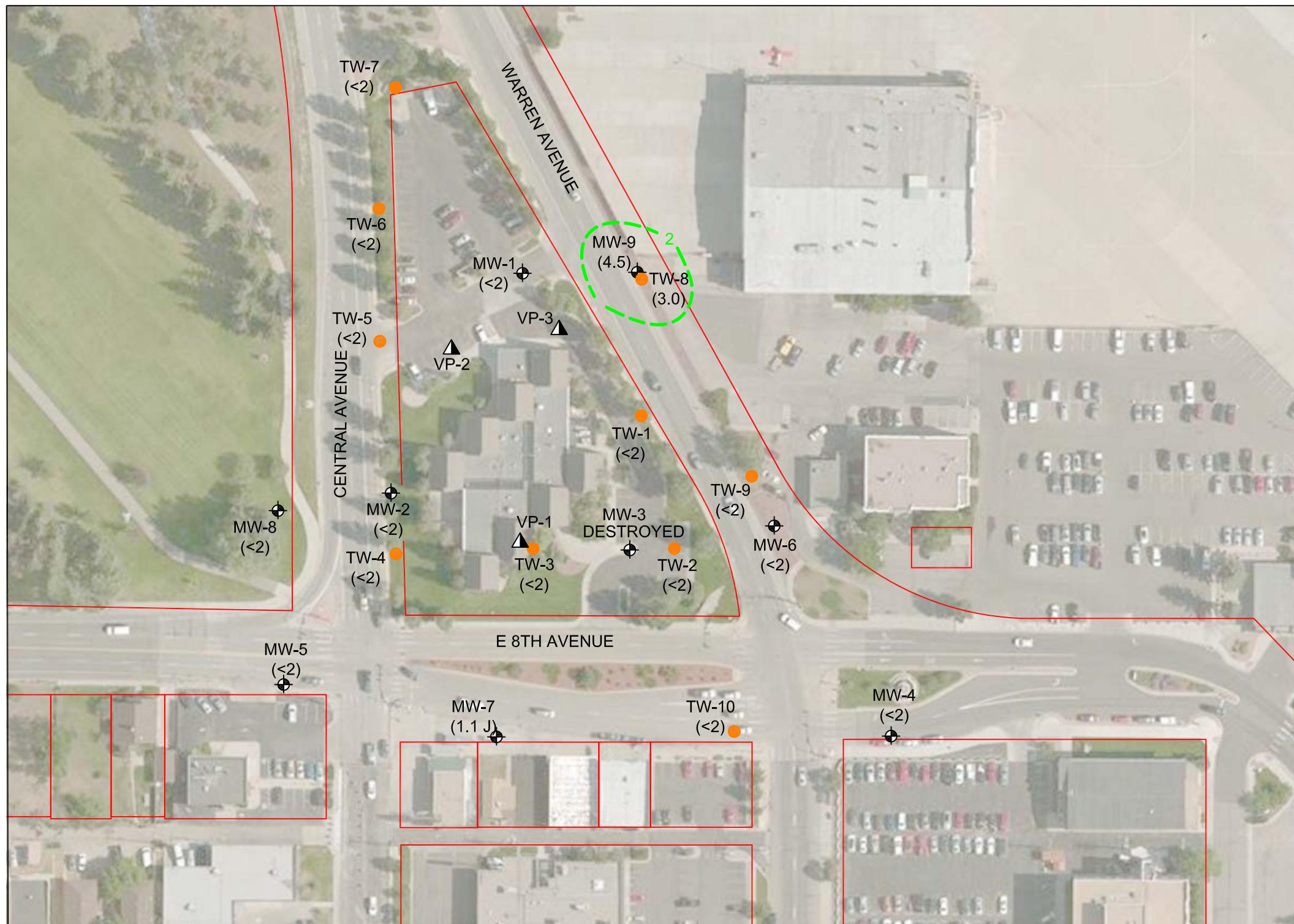
CHEYENNE AIRPORT ADDITION
112 EAST 8TH AVENUE
CHEYENNE, WYOMING

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FIGURE #5

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APPVD. BY:	JAS
SCALE:	1" = 100'
DATE:	9/11/14
JOB NO.	24147141
ACAD NO.	005
SHEET NO.:	5 OF 9

CHEYENNE AIRPORT
ADDITION



LEGEND

- - APPROXIMATE LOCATION OF MONITORING WELL
- ▲ - APPROXIMATE LOCATION OF SOIL VAPOR POINT
- - APPROXIMATE LOCATION OF TEMPORARY MONITORING WELL
- APPROXIMATE PROPERTY LINES
- (<2) - TCE CONCENTRATION ($\mu\text{g}/\text{L}$)
- ($\mu\text{g}/\text{L}$) - MICROGRAMS PER LITER
- (5) - INDICATES AN EXCEEDENCE OF THE WDEQ GROUNDWATER CLEANUP LEVEL, FACT SHEET #12.
- 2 - TRICHLOROETHENE (TCE) ISOCONCENTRATION, JULY 2014 ($\mu\text{g}/\text{L}$)

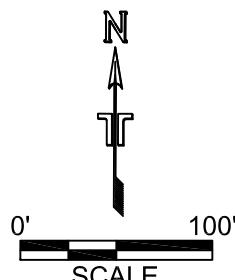


FIGURE 6 - GROUNDWATER ISOCONCENTRATION DIAGRAM (TCE)

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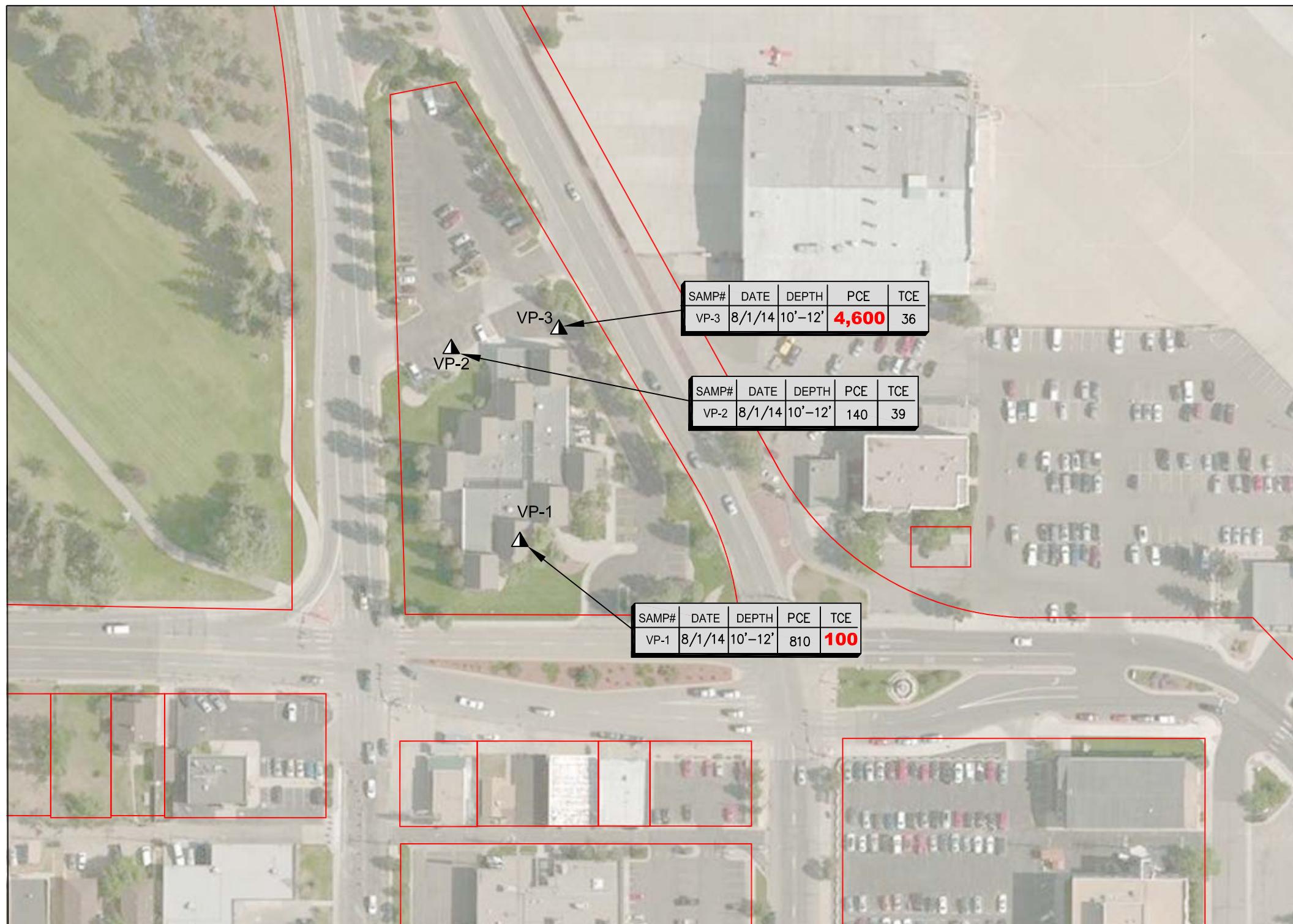
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FIGURE #6

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APPVD. BY:	JAS
SCALE:	1' = 100'
DATE:	2/12/15
JOB NO.	24147141
ACAD NO.	006
SHEET NO.:	6 OF 9

CHEYENNE AIRPORT
ADDITION



LEGEND

- ▲ - APPROXIMATE LOCATION OF SOIL VAPOR POINT
- APPROXIMATE PROPERTY LINES

SAMP#	DATE	DEPTH	PCE	TCE
			2,720	42

WHERE:

PCE = TETRACHLOROETHENE ($\mu\text{g}/\text{m}^3$)
TCE = TRICHLOROETHENE ($\mu\text{g}/\text{m}^3$)

BOLD = ABOVE DEQ-ORSP DEEP SOIL VAPOR SCREENING LEVEL
($\mu\text{g}/\text{m}^3$) = MICROGRAMS PER CUBIC METER

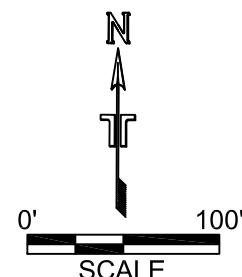


FIGURE 7 - SOIL VAPOR ANALYTICAL DIAGRAM

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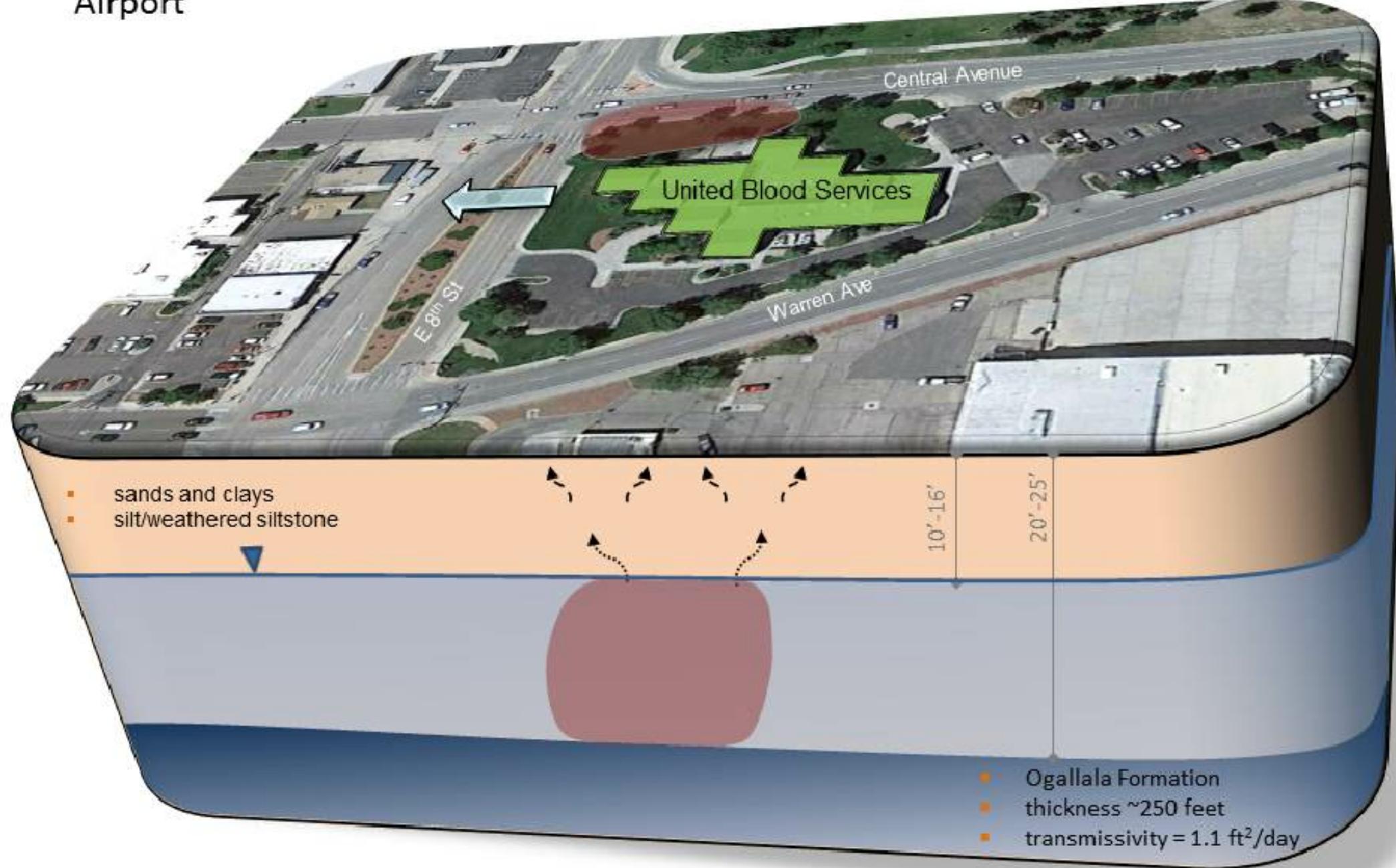
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FIGURE #7

DESIGNED BY:	JAS
DRAWN BY:	JAS
APPVD. BY:	JAS
SCALE:	1' = 100'
DATE:	10/9/14
JOB NO.	24147141
ACAD NO.	007
SHEET NO.:	7 OF 9

Airport

North



Contaminant Migration

- ↗ Vapor Diffusion
- ↗ Advective Vapor Flow
- ↖ Approximate Groundwater Flow

Vapor Intrusion Pathway

- | | |
|--|--|
| Complete: On-site Worker | Approximate Contaminant Plume |
| Approximate Groundwater Level | |



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FIGURE 8: SITE CONCEPTUAL MODEL
CHEYENNE AIRPORT ADDITION PROJECT

112 EAST 8TH AVENUE
CHEYENNE, WYOMING

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FIGURE #8

DESIGNED BY:	MLJ
DRAWN BY:	JAS
APP'D. BY:	CM
SCALE:	NTS
DATE:	10/9/14
JOB NO.	24149141
ACAD NO.	008
SHEET NO.:	8 OF 9

Impacted Media

Transport Mechanism

Exposure Media

Exposure Route

Receptor

Surface Soil

Sub-surface Soil

Groundwater

Vapor Diffusion

Groundwater

Ingestion
Dermal

Surface Water

Advective Flow

Indoor Air

Inhalation

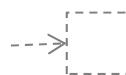
Outdoor Air

Sediments

Surface Water

Sediments

On-site Worker	Off-site Worker	Construction Worker	Visitor
-	-	-	-
-	-	-	-
X	-	-	-



Media not impacted or transport mechanism/pathway not present

X

Pathway is or might be complete

-

Pathway is not complete

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FIGURE 9: SITE CONCEPTUAL MODEL FLOW CHART

CHEYENNE AIRPORT ADDITION PROJECT
112 EAST 8TH AVENUE
CHEYENNE, WYOMING

FIGURE #9

DESIGNED BY:	MTJ
DRAWN BY:	JAS
APPV'D. BY:	JAS
DATE:	9/19/14
JOB NO.	24149141
ACAD NO.:	9
SHEET NO.:	9 of 9

APPENDIX B

Tables

Table 1 – Summary of Field Survey Data

Table 2 – Summary of ATHA Results

Table 3 – Summary of Groundwater Field Parameter Measurements

Table 4 – Summary of Well Construction and Depth to Groundwater Measurements

Table 5 – Summary of Soil Analytical Results

Table 6 – Summary of Groundwater VOC Analytical Results

Table 7 – Summary of Groundwater Natural Attenuation Parameters

Table 8 – Summary of Vapor Analytical Results

Table 9 – Summary of Waste Soil and Analytical Results

TABLE 1
SUMMARY OF FIELD SURVEY DATA

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149141

UPDATED: September 23, 2014

Location	Elevation (ft msl)	Latitude Global	Longitude Global
TW-1	6140.86	N41°09'13.15843"	W104°49'17.63754"
TW-2	6141.51	N41°09'12.03742"	W104°49'17.31340"
TW-3	6141.28	N41°09'12.07143"	W104°49'18.88027"
TW-4	6140.26	N41°09'12.06003"	W104°49'20.40484"
TW-5	6142.55	N41°09'13.84720"	W104°49'20.51659"
TW-6	6142.66	N41°09'14.96033"	W104°49'20.48459"
TW-7	6143.53	N41°09'15.97156"	W104°49'20.26092"
TW-8	6141.47	N41°09'14.30502"	W104°49'17.58958"
TW-9	6140.67	N41°09'12.62469"	W104°49'16.43150"
TW-10	6138.66	N41°09'10.48776"	W104°49'16.70748"
MW-1	6140.71	N41°09'14.38343"	W104°49'18.91133"
MW-2	6141.47	N41°09'12.56787"	W104°49'20.31046"
MW-4	6137.84	N41°09'10.41104"	W104°49'14.96704"
MW-5	6137.83	N41°09'10.99060"	W104°49'21.69509"
MW-6	6140.35	N41°09'12.20305"	W104°49'16.19811"
MW-7	6138.28	N41°09'10.50019"	W104°49'19.34879"
MW-8	6138.35	N41°09'12.45136"	W104°49'21.70234"
MW-9	6141.14	N41°09'14.36421"	W104°49'17.63666"
VP-1	6141.64	N41°09'12.13442"	W104°49'19.03207"
VP-2	6142.83	N41°09'13.77175"	W104°49'19.73265"
VP-3	6141.65	N41°09'13.90915"	W104°49'18.53059"

Notes:

1. TW = Temperary Well
2. MW = Monitoring well
3. VP = Soil Vapor Point
4. Monitoring well elevations measured at top of casing
5. Temperary monitoring well and vapor point elevations measured at ground surface
6. ft msl - elevation in feet above mean sea level

TABLE 2
SUMMARY OF ATHA RESULTS

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149141

UPDATED: September 23, 2014

Boring Name	Sample Date	Depth (feet)	PID Reading (ppm)
TW-1	7/16/2014	15-20	940
TW-2	7/16/2014	15-20	1.80
TW-3	7/16/2014	14-19	6.80
TW-4	7/16/2014	9-14	2.20
TW-5	7/16/2014	9-14	3.00
TW-6	7/16/2014	9-14	3.50
TW-7	7/17/2014	9-14	1.30
TW-8	7/17/2014	14-19	404
TW-9	7/17/2014	9-14	2.10
MW-4	7/17/2014	14-16	3.00
MW-5	7/17/2014	9-11	3.30
MW-6	7/17/2014	14-16	4.10
MW-7	7/18/2014	11-13	2.40
MW-8	7/18/2014	14-16	0.70
MW-9	7/18/2014	14-16	2.70
VP-1	7/16/2014	9-12	2.10
VP-2	7/18/2014	0-4	70.6
VP-3	7/18/2014	4-9	16.3

Notes:

1. ATHA = Ambient Temperutury Headspace Analysis
2. ppm = parts per million
3. Depth measured below ground surface (bgs)

TABLE 3
SUMMARY OF GROUNDWATER FIELD PARAMETER MEASUREMENTS

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149141

UPDATED: September 23, 2014

Sample I.D.	Sample Date	Temperature °C	Conductivity mS/cm	Dissolved Oxygen mg/L	pH S.U.	ORP mV	Turbidity NTU
MW-1	7/14/2014	15.58	2.22	1.50	6.99	251.7	NA
MW-2	7/31/2014	14.80	1.59	6.24	6.83	165.3	5.79
MW-3				Well could not be found			
MW-4	7/24/2014	NA	NA	NA	NA	NA	NA
MW-5	7/24/2014	17.00	3.80	5.78	6.96	189.7	7.58
MW-6	7/23/2014	16.47	4.28	8.32	7.06	206.7	NA
MW-7	7/23/2014	17.01	1.84	8.55	6.92	174.5	12.3
MW-8	7/23/2014	12.61	1.83	8.17	6.83	165.5	179
MW-9	7/23/2014	17.37	1.65	7.59	7.01	167.8	106

Notes:

1. mS/cm = millisiemens per centimeter
2. mg/L = milligrams per liter
3. ORP = oxidation reduction potential
4. °C = degrees Celcius
5. S.U. = Standard Units
6. mV = millivolts
7. NTU = nephelometric turbidity units
8. NA = well did not produce sufficient water volume to allow for measurement of field parameters

TABLE 4
SUMMARY OF WELL CONSTRUCTION AND DEPTH TO GROUNDWATER MEASUREMENTS

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149141

UPDATED: September 23, 2014

Well Number	Well Depth (ft bgs)	Well Diameter (inches)	Screen Interval (ft bgs)	Date Measured	TOC (ft msl)	DTW (ft bTOC)	Groundwater Elevation (ft msl)
MW-1	21.5	2	12.0-21.5	7/14/2014	6,140.71	11.38	6,129.33
MW-2	21.5	2	10-20	7/31/2014	6,141.47	13.32	6,128.15
MW-3	20	1	10-20		Well could not be found		
MW-4	19	2	9-19	7/24/2014	6,137.84	16.10	6,121.74
MW-5	19	2	9-19	7/24/2014	6,137.83	11.30	6,126.53
MW-6	19	2	9-19	7/23/2014	6,140.35	13.23	6,127.12
MW-7	19	2	9-19	7/23/2014	6,138.28	11.86	6,126.42
MW-8	19	2	9-19	7/23/2014	6,138.35	10.48	6,127.87
MW-9	19	2	9-19	7/23/2014	6,141.14	12.23	6,128.91

Notes:

1. TOC = Top of casing elevation
2. DTW = Depth to water
3. ft msl = elevation in feet above mean sea level
4. ft bTOC = feet below top of casing
5. ft bgs = feet below ground surface

TABLE 5
SUMMARY OF SOIL ANALYTICAL RESULTS

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149141

UPDATED: September 23, 2014

Well Name	Sample Date	Sample Depth, ft.	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Acetone	2-Butanone	Chloroform	2-Hexanone	Methyl Chloride	TPH-GRO	TPH-DRO	Arsenic	Barium	Chromium	Lead
			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
8260																			
TW-1	7/16/2014	15-20	<2	<2	<2	<2	<2	45	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-2	7/16/2014	15-20	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-3	7/16/2014	14-19	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-4	7/16/2014	9-14	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-5	7/16/2014	9-14	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-6	7/16/2014	9-14	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-7	7/16/2014	9-14	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-8	7/17/2014	14-19	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-9	7/17/2014	9-14	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
TW-10	7/17/2014	4-9	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
VP-1	7/16/2014	9-12	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
VP-2	7/18/2014	0-4	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
VP-3	7/18/2014	4-9	6.3	<2	<2	<2	<2	<20	<10	<5	<10	<5	NA	NA	NA	NA	NA	NA	
MW-4	7/17/2014	14-16	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	<0.5	<5	2.6	47.8	6.1	5.1	
MW-5	7/17/2014	9-11	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	<0.5	<5	2.3	52.7	1.4	2.7	
MW-6	7/17/2014	14-16	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	<0.5	<5	3.4	70.9	8.0	8.0	
MW-7	7/18/2014	11-13	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	<0.5	<5	1.7	52.0	1.4	2.4	
MW-8	7/18/2014	14-16	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	<0.5	<5	2.3	45.6	7.7	4.2	
MW-9	7/18/2014	14-16	<2	<2	<2	<2	<2	<20	<10	<5	<10	<5	<0.5	<5	2.0	58.3	4.2	2.7	
Residential Soil Cleanup Level			22,000	910	160,000	150,000	240,000	60	28,000,000	290	NA	56,000	2,300	0.61	15,000	280	400,000		
Migration-to-GW Soil Cleanup Level			2.1	2.01	17.5	28.6	0.00246	0.63	6,580	4,480	20.2	NA	1.1	28	0.293	82.6	180,000	13,500	

Notes:

1. Temporary monitoring wells (TW designation) and vapor point soil borings (VP designation) were analyzed for the complete list of VOCs by EPA Method 8260

2. New permanent monitoring wells (MW designation) were analyzed for the complete list of VOCs by EPA Method 8260, and TPH-GRO and DRO by EPA method 8015, and RCRA metals by EPA Method 6010

3. Constituents shown in the table include site specific selected COCs (PCE and its degradation products) and compounds detected above their respective laboratory method detection limits

4. PCE = tetrachloroethene

5. TPH-DRO = total petroleum hydrocarbons - diesel range organics

6. TPH-GRO = total petroleum hydrocarbons - gasoline range organics

7. 1,1-DCE = dichloroethene

8. TCE = trichloroethene

9. µg/kg = micrograms per kilogram

10. mg/kg = milligrams per kilogram

11. J2 = The compound was detected and verified by its' mass spectrum at an estimated concentration between the reporting limit and method detection limit

12. NA = Not analyzed

13. NS = No standard

14. **BOLD** indicates analytical results above the method detection limit

Highlight indicates an exceedance of the migration-to-groundwater soil cleanup level listed in the WDEQ/SHWD/VRP Fact Sheet 12 Cleanup Level Look-up Table, dated December 2013

TABLE 6
SUMMARY OF GROUNDWATER VOC ANALYTICAL RESULTS

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149141

UPDATED: September 23, 2014

Well Name	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Acetone	Methyl Chloride	2-Butanone	Chloroform	2-Hexanone	TPH-GRO	TPH-DRO
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L
8260C														
MW-1	10/1994 07/14/14	<0.5 <2	5.3 <2	5.8 <2	-- <2	16.6 <5	-- <2	-- <20	-- <5	-- <10	-- <5	-- <10	-- <0.5	-- <0.5
MW-2	10/1994 07/18/14 ² 07/31/14	108 43 70	5.3 <2 <2	5.8 <2 <2	-- <2 <2	<0.5 <5 <5	-- <2 <2	-- <20 <20	-- <5 <5	-- <10 <10	-- <5 <5	-- <10 <10	-- NA <0.5	-- NA <0.5
MW-3	10/1994	<0.5	<0.5	<0.5	--	<0.5	--	--	--	--	--	--	--	--
MW-4	07/17/14 ² 07/24/14	<2 <2	<2 <2	<2 <2	<2 <2	<5 <5	<2 <2	45 <20	<5 <5	26 <10	5.9 9.3	14 <10	NA <0.5	NA <0.5
MW-5	07/17/14 ² 07/24/14	<2 1.4 J2	<2 <2	<2 <2	<2 <2	<5 <5	<2 <2	<20 <20	<5 <5	<10 <10	<5 <5	<10 <10	NA <0.5	NA <0.5
MW-6	07/24/14	<2	<2	<2	<2	<5	<2	<20	<5	<10	<5	<10	<0.5	<0.5
MW-7	07/23/14	<2	1.1 J2	<2	<2	<5	<2	<20	<5	<10	<5	<10	<0.5	<0.5
MW-8	07/23/14	<2	<2	<2	<2	<5	<2	<20	<5	<10	<5	<10	<0.5	<0.5
MW-9	07/23/14	<2	4.5	<2	<2	<5	<2	<20	<5	<10	<5	<10	<0.5	<0.5
TW-1	07/17/14	<2	<2	<2	<2	<5	<2	<20	<5	<10	<5	<10	NA	NA
TW-2	07/17/14	<2	<2	<2	<2	<5	<2	<20	<5	<10	<5	<10	NA	NA
TW-3	07/17/14	<2	<2	<2	<2	<5	<2	<20	<5	<10	23	<10	NA	NA
TW-4	07/17/14	15	<2	<2	<2	<5	<2	<20	<5	<10	<5	<10	NA	NA
TW-5	07/17/14	<2	<2	<2	<2	<5	<2	27	<5	<10	<5	<10	NA	NA
TW-6	07/17/14	<2	<2	<2	<2	<5	<2	<20	<5	<10	<5	<10	NA	NA
TW-7	07/17/14	<2	<2	<2	<2	<5	<2	94 B	23 B	<10	<5	<10	NA	NA
TW-8	07/17/14	<2	3.0	<2	<2	<5	<2	<20	<5	<10	<5	<10	NA	NA
TW-9	07/17/14	<2	<2	<2	<2	<5	<2	120	<5	20	<5	<10	NA	NA
TW-10	07/17/14	<2	<2	<2	<2	<5	<2	<20	<5	<10	<5	<10	NA	NA
Water Cleanup Level		5	5	70	100	7	2	32,800	5	21,900	80	no standard	7.3	10

Notes:

1. Grab samples were collected from MW-2 on 7/18/14, MW-4 on 7/17/14, and MW-5 on 7/17/14 and analyzed for complete list of VOCs by EPA Method 8260 per WDEQ request
2. Existing monitoring wells MW-1 on 7/14/14 and MW-2 on 7/31/14 were analyzed for the complete list of VOCs by EPA Method 8260, TPH-GRO and DRO by EPA method 8015, and RCRA 8 Metals by Method 6010
3. Temporary monitoring wells (TW designation) were analyzed for the complete list of VOCs by EPA Method 8260
4. New permanent monitoring wells (MW-4 through MW-9) were analyzed for the complete list of VOCs by EPA Method 8260; TPH-GRO and DRO by EPA method 8015; RCRA 8 Metals by EPA method 6010
5. Constituents shown in the table include site specific selected COCs (PCE and its degradation products) and compounds detected above their respective laboratory method detection limits
6. PCE = tetrachloroethene
7. TPH-DRO = total petroleum hydrocarbons - diesel range organics
8. TPH-GRO = total petroleum hydrocarbons - gasoline range organics
9. DCE = dichloroethene
10. TCE = trichloroethene
11. ug/L = micrograms per liter
12. mg/L = milligrams per liter
13. J2 = The compound was detected and verified by its' mass spectrum at an estimated concentration between the reporting limit and method detection limit
14. B = analyte was detected in the laboratory method blank
15. NA = sample was not collected or not analyzed for by this analytical method
16. -- = historical data was not available for this constituent; result may have been below detection limits or it may not have been analyzed
17. **BOLD** indicates analytical results above the method detection limit

Highlight indicates an exceedance of the water cleanup level listed in the WDEQ/SHWD/VRP Fact Sheet 12 and 13, dated December 2013

TABLE 7
SUMMARY OF GROUNDWATER NATURAL ATTENUATION PARAMETERS

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149060

UPDATED: September 23, 2014

Well Name	Sample Date	Methane	Ethane	Ethene	Iron	Iron, Dissolved	Lead
		mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
RSK 175							
MW-1	07/14/14	NA	NA	NA	NA	NA	<5.0
MW-2	07/18/14	NA	NA	NA	NA	NA	NA
	07/31/14	<0.01	<0.01	<0.01	517	<50.0	<5.0
MW-4	07/17/14	NA	NA	NA	NA	NA	NA
	07/24/14	<0.01	<0.01	<0.01	12,500	<50.0	10.9
MW-5	07/17/14	NA	NA	NA	NA	NA	NA
	07/24/14	<0.01	<0.01	<0.01	1,020	<50.0	<5.0
MW-6	07/24/14	<0.01	<0.01	<0.01	61,900	<50.0	42.4
MW-7	07/23/14	<0.01	<0.01	<0.01	5,330	<50.0	9.9
MW-8	07/23/14	<0.01	<0.01	<0.01	2,980	<50.0	5.5
MW-9	07/23/14	<0.01	<0.01	<0.01	11,000	<50.0	17.2
Water Clean up Level		NS	NS	NS	25,500	NS	15

Well Name	Sample Date	Arsenic	Barium	Chromium	Nitrate	Sulfate	TOC
		µg/L	µg/L	µg/L	mg/L	mg/L	mg/L
EPA 6010							
MW-1	07/14/14	<10.0	322	<5.0	NA	NA	NA
MW-2	07/18/14	NA	NA	NA	NA	NA	NA
	07/31/14	<10.0	264	12.2	1.38	102	4.4
MW-4	07/17/14	NA	NA	NA	NA	NA	NA
	07/24/14	<10.0	168	10.8	2.42	37.7	3.1
MW-5	07/17/14	NA	NA	NA	NA	NA	NA
	07/24/14	<10.0	583	6.50	4.37	60.4	1.2
MW-6	07/24/14	27.7	1,710	64.5	5.21	29.3	<1.0
MW-7	07/23/14	<10.0	423	304	2.82	35.2	1.2
MW-8	07/23/14	<10.0	453	5.70	1.93	49.6	2.2
MW-9	07/23/14	<10.0	482	13.2	2.67	23.5	<1.0
Water Clean up Level		10	2,000	100	10	250	NA

NOTES:

1. mg/L = milligrams per liter
2. µg/L = micrograms per liter
3. NA = not analyzed
4. NS = no standard for this compound
5. **BOLD** indicates analytical results above the reporting limit.

Highlight indicates an exceedance of the water cleanup level in the VRP Fact Sheets 12&13, dated Dec. 2013

TABLE 8
SUMMARY OF VAPOR ANALYTICAL RESULTS

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149141

UPDATED: October 8, 2014

Well Name	Sample Date	Sample Depth ft bgs	PCE µg/m ³	TCE µg/m ³	Acetone µg/m ³	Chloroform µg/m ³	n-Hexane µg/m ³	Methylene Chloride µg/m ³	2-Butanone (MEK) µg/m ³
VP-1	8/1/2014	10-12	810	100	57	23	13	11	9.1
VP-2	8/1/2014	10-12	140	39	55	2.4	15	14	<7.4
VP-3	8/1/2014	10-12	4,600	36	29	4.1	<2.8	3.1	<15
Deep Soil Vapor Action Level approved by WDEQ			2,720	42					

NOTES:

1. ft bgs = feet below ground surface
 2. µg/m³ = micrograms per cubic meter
 3. **BOLD** indicates analytical results above the method detection limit
 4. Constituents shown in the table were detected in soil and/or groundwater samples as well as the soil vapor samples analyzed via TO-15
 5. The WDEQ approved the deep soil vapor action levels for PCE and TCE shown above, which are the drivers at the site. Additional constituents are under review at this time.
- Highlight indicates an exceedance of the WDEQ deep soil vapor action level

Table 9
SUMMARY OF WASTE SOIL AND WATER ANALYTICAL RESULTS

PROJECT NAME: Airport Addition Orphan Site

PROJECT LOCATION: Cheyenne, Wyoming

PROJECT NUMBER: 24149141

UPDATED: September 23, 2014

SOIL

Drum Identification	Sample Date	PCE mg/kg
AP-S1	8/26/2014	<0.002
AP-S2	8/26/2014	<0.002
AP-S3	8/26/2014	<0.002
AP-S4	8/26/2014	<0.002
AP-S5	8/26/2014	<0.002
AP-S6	8/26/2014	<0.002
AP-S7	8/26/2014	<0.002
<hr/>		
WDEQ TCLP Haz.Waste Level (mg/L)		0.7
WDEQ TCLP *20 Haz Waste Level (mg/Kg)		14.0
<hr/>		

WASTE WATER

Drum Identification	Sample Date	PCE mg/L	Methylene Chloride mg/L
AP-W1	8/26/2014	<0.002	<0.005
<hr/>			
VRP Water Cleanup Level		0.005	0.005
EPA MCL in drinking water		0.005	0.005
<hr/>			

Notes for both tables:

1. Sample ID's correspond to the drum in which the sample was collected (e.g. sample SC-S1 is from Steam Cleaner, Soil Drum 1; sample SC-W1 is from Steam Cleaner, Water Drum 1, etc.)
2. Constituents selected for analysis are based on the laboratory analytical results of the investigation samples that were placed in the drums; only those constituents above WDEQ cleanup levels were analyzed
3. mg/L = milligrams per liter
4. mg/kg = milligrams per kilogram
5. PCE = tetrachloroethene
6. WDEQ TCLP Haz.Waste Level = Wyoming Department of Environmental Quality / Solid and Hazardous Waste Division (WDEQ/SHWD) Guideline #10 Hazardous Waste Limits based on samples analyzed by the Toxicity Characteristic Leaching Procedure (TCLP); units are in mg/L; these limits are provided for reference only as TCLP analysis was not used for the soil samples
7. WDEQ TCLP *20 Haz Waste Level = WDEQ TCLP hazardous waste limit multiplied by 20; it is an industry "rule of thumb" approximate equivalent of the TCLP limit using the standard total constituent analyses method in lieu of TCLP analysis; units are mg/kg; the samples were analyzed using the total constituent analysis method; therefore, this is the relevant reference limit for evaluating if the constituent concentrations exceed hazardous waste limits.
8. VRP Water Cleanup Level = groundwater cleanup level listed in the WDEQ/SHWD/VRP Fact Sheet 12 and 13, dated December 2013
9. EPA MCL in drinking water = drinking water maximum contaminant level established by the U.S. Environmental Protection Agency
10. NE = not established
11. **Bold** indicates the sample result exceeds the WDEQ TCLP *20 limit (for soil) or the EPA MCL (for water)

APPENDIX C

Boring Logs

WELL LOG NO. MW-4

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PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1528919556° Longitude: 104.820824178°	INSTALLATION DETAILS	DEPTH (Ft.)	
DEPTH	0.4 ASPHALT - 4 inches SILTY SAND WITH GRAVEL(SM) , medium grained, brown	Top cap	5	
5.0	POORLY GRADED SAND WITH GRAVE(SP), coarse grained, light brown	Bentonite chips with riser pipe	10	
12.0	SANDY LEAN CLAY(CL), fine grained, brown	Riser pipe with sand pack	15	
19.0	Boring Terminated at 19 Feet	Screen pack in sand		
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Auger	TOC Elevation 6137.84	Notes:		
Abandonment Method: Monitoring Well Constructed				
WATER LEVEL OBSERVATIONS		Well Started: 7/17/2014	Well Completed: 7/17/2014	
13' During exploration		Drill Rig: DR009	Driller: Terracon	
16.1' on 7/23/14		Project No.: 24149141	Exhibit: B-1	

WELL LOG NO. MW-5

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PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1530529444° Longitude: 104.822693081°	INSTALLATION DETAILS		
DEPTH		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	
0.4	ASPHALT - 4 inches SILTY SAND WITH GRAVEL(SM) , medium grained, brown	Top cap		
3.0	POORLY GRADED SAND WITH GRAVE(SP) , coarse grained, brown	Bentonite chips with riser pipe		
14.5	SANDY LEAN CLAY(CL) , fine grained, brown	Riser pipe with sand pack	5  4-3-2-6 1.6	
19.0	Boring Terminated at 19 Feet	Screen pack in sand	10  10-11-26-28 3.3  15  1-2-4-6 1.2	
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Auger	TOC Elevation 6142.55	Notes:		
Abandonment Method: Monitoring Well Constructed				
WATER LEVEL OBSERVATIONS		Well Started: 7/17/2014	Well Completed: 7/17/2014	
 13.5' During exploration		Drill Rig: DR009	Driller: Terracon	
 11.3' on 7/23/14		Project No.: 24149141	Exhibit: B-2	

WELL LOG NO. MW-6

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1533897361° Longitude: 104.821166142°	INSTALLATION DETAILS	DEPTH (Ft.)	
	DEPTH		WATER LEVEL OBSERVATIONS	
		SANDY LEAN CLAY WITH GRAVEL(CL) , medium grained, brown POORLY GRADED SAND WITH GRAVEL(SP) , medium grained, brown SANDY LEAN CLAY(CL) , fine grained, brown	Top cap Bentonite chips with riser pipe Riser pipe with sand pack Screen pack in sand	
	5.0		SAMPLE TYPE	
	14.5		FIELD TEST RESULTS	
	19.0		PID (ppm)	
Boring Terminated at 19 Feet				
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Auger	TOC Elevation 6140.35	Notes:		
Abandonment Method: Monitoring Well Constructed				
WATER LEVEL OBSERVATIONS		Well Started: 7/17/2014	Well Completed: 7/17/2014	
 13' During exploration		Drill Rig: DR009	Driller: Terracon	
 13.23' on 7/23/14		Project No.: 24149141	Exhibit: B-3	

WELL LOG NO. MW-7

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PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1529167194° Longitude: 104.822041331°	INSTALLATION DETAILS	DEPTH (Ft.)	
DEPTH			WATER LEVEL OBSERVATIONS	
		Top cap		
4.0	SILTY SAND WITH GRAVEL(SM) , medium grained, brown	Bentonite chips with riser pipe		
15.5	POORLY GRADED SAND WITH GRAVEL(SP) , coarse grained, brown	Riser pipe with sand pack	5	
19.0	SANDY LEAN CLAY(CL) , fine grained, brown	Screen pack in sand	10	
	Boring Terminated at 19 Feet		15	
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Auger	TOC Elevation 6143.53	Notes:		
Abandonment Method: Monitoring Well Constructed				
WATER LEVEL OBSERVATIONS		Well Started: 7/18/2014	Well Completed: 7/18/2014	
 13' During exploration		Drill Rig: DR009	Driller: Terracon	
 11.86' on 7/23/14		Project No.: 24149141	Exhibit: B-4	

WELL LOG NO. MW-8

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1534587111° Longitude: 104.822695094°	INSTALLATION DETAILS	DEPTH (Ft)	
DEPTH	Poorly Graded Sand with Gravel (SP) , coarse grained, brown	Top cap Bentonite chips with riser pipe Riser pipe with sand pack Screen pack in sand	5 10 15	
14.0	Sandy Lean Clay (CL) , fine grained, brown		8-7-19-20-23 8-19-20-23 5-6-19-23	
19.0	Boring Terminated at 19 Feet		0.3 0.0 0.7	
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Auger	TOC Elevation 6138.35	Notes:		
Abandonment Method: Monitoring Well Constructed				
WATER LEVEL OBSERVATIONS		Well Started: 7/18/2014	Well Completed: 7/18/2014	
<input checked="" type="checkbox"/> 15' During exploration		Drill Rig: DR009	Driller: Terracon	
<input checked="" type="checkbox"/> 10.48' on 7/23/14		Project No.: 24149141	Exhibit: B-5	

WELL LOG NO. MW-9

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PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1539900583° Longitude: 104.821565739°	INSTALLATION DETAILS	DEPTH (Ft.)	
DEPTH			WATER LEVEL OBSERVATIONS	
8.0	SANDY LEAN CLAY WITH GRAVEL medium grained, dark brown	Top cap Bentonite chips with riser pipe	5  4-4-4-4 0.8	
15.0	POORLY GRADED SAND WITH GRAVEL(SP) , coarse grained, light brown	Riser pipe with sand pack Screen pack in sand	10   7-9-19-27 2.6	
19.0	SANDY LEAN CLAY(CL) , fine grained, brown		15  6-16-6-8 2.7	
Boring Terminated at 19 Feet				
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Auger	TOC Elevation 6141.14	Notes:		
Abandonment Method: Monitoring Well Constructed				
WATER LEVEL OBSERVATIONS		Well Started: 7/18/2014	Well Completed: 7/18/2014	
 13' During exploration		Drill Rig: DR009	Driller: Terracon	
 12.23' on 7/23/14		Project No.: 24149141	Exhibit: B-6	

PROBE LOG NO. TW-1

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THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL AIRPORT DRILLING LOGS.GPJ TEMPLATE UPDATE 3-31-14.GPJ 9/19/14

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY	
SITE: 112 E. 8th Avenue Cheyenne, WY			
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1536551194° Longitude: 104.821565983°	INSTALLATION DETAILS	
DEPTH		DEPTH (Ft.)	
1.0	SILTY SAND(SM) , medium grained, brown		
2.0	POORLY GRADED SAND WITH GRAVEL(SM) , coarse grained, brown		
5.0	SANDY LEAN CLAY(CL) , fine grained, brown	Bentonite chips with riser pipe	
16.0	POORLY GRADED SAND WITH GRAVEL(SM) , coarse grained, brown	Riser pipe with sand pack	
19.0	SANDY LEAN CLAY(CL) , fine grained, fine grained Probe Terminated at 19 Feet	Screen pack in sand	
Stratification lines are approximate. In-situ, the transition may be gradual.			
Advancement Method: Direct Push	Ground Surface Elevation 6140.86	Notes:	
Abandonment Method: Borings backfilled with bentonite upon completion.			
WATER LEVEL OBSERVATIONS		Probe Started: 7/16/2014	
15.5' During exploration		Probe Completed: 7/16/2014	
		Drill Rig: DR009	
		Driller: Terracon	
		Project No.: 24149141	
		Exhibit: B-7	

Terracon

PROBE LOG NO. TW-2

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1533437278° Longitude: 104.821475944°	INSTALLATION DETAILS	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS SAMPLE TYPE
	0.3 Asphalt - 4 inches 1.0 Road base - 8 inches coarse grained, brown POORLY GRADED SAND WITH GRAVEL(SP) , medium grained, brown	Bentonite chips with riser pipe		 0.6
	5.0 SANDY LEAN CLAY(CL) , fine grained, brown 6.5 POORLY GRADED SAND WITH GRAVEL(SP) , medium grained, light brown	Riser pipe with sand pack	5	 0.1
	16.0 SANDY LEAN CLAY(CL) , fine grained, brown 19.0 Probe Terminated at 19 Feet	Screen pack in sand	10 15 19.0	 0.8  1.8 
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Direct Push	Ground Surface Elevation 6141.51	Notes:		
Abandonment Method: Borings backfilled with bentonite upon completion.				
WATER LEVEL OBSERVATIONS		Probe Started: 7/16/2014	Probe Completed: 7/16/2014	
 15.5' During exploration		Drill Rig: DR009	Driller: Terracon	
		Project No.: 24149141	Exhibit: B-8	

PROBE LOG NO. TW-3

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THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL AIRPORT DRILLING LOGS.GPJ TEMPLATE UPDATE 3-31-14.GPJ 9/19/14

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY	
SITE: 112 E. 8th Avenue Cheyenne, WY			
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.153353175° Longitude: 104.821911186°	INSTALLATION DETAILS	
DEPTH		DEPTH (Ft.)	
8.0	SANDY LEAN CLAY WITH GRAVEL(CL) , medium grained, brown	Bentonite chips with riser pipe	
17.0	POORLY GRADED SAND WITH GRAVEL(SP) , coarse grained, light brown	Riser pipe with sand pack	
19.0	SANDY LEAN CLAY(CL) , fine grained, brown	Screen pack in sand	
Probe Terminated at 19 Feet			
Stratification lines are approximate. In-situ, the transition may be gradual.			
Advancement Method: Direct Push	Ground Surface Elevation 6141.28	Notes:	
Abandonment Method: Borings backfilled with bentonite upon completion.			
WATER LEVEL OBSERVATIONS			
 14' During exploration		Probe Started: 7/16/2014 Probe Completed: 7/16/2014	
		Drill Rig: DR009 Driller: Terracon	
		Project No.: 24149141 Exhibit: B-9	

Terracon

PROBE LOG NO. TW-4

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1533500083° Longitude: 104.822334678°	INSTALLATION DETAILS	DEPTH (Ft.)	
DEPTH	SILTY SAND(SM) , medium grained, brown		WATER LEVEL OBSERVATIONS	
1.5	SILTY CLAYEY SAND WITH GRAVEL(SM) , medium grained, light brown	Bentonite chips with riser pipe	SAMPLE TYPE	
4.0	POORLY GRADED SAND WITH GRAVEL(SP) , coarse to medium grained, brown	Riser pipe with sand pack	PID (ppm)	
15.0	SANDY LEAN CLAY(CL) , fine grained, brown	Screen pack in sand		
19.0	Probe Terminated at 19 Feet			
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Direct Push	Ground Surface Elevation 6140.26	Notes:		
Abandonment Method: Borings backfilled with bentonite upon completion.				
WATER LEVEL OBSERVATIONS		Probe Started: 7/16/2014	Probe Completed: 7/16/2014	
 14' During exploration		Drill Rig: DR009	Driller: Terracon	
		Project No.: 24149141	Exhibit: B-10	

PROBE LOG NO. TW-5

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1538464444° Longitude: 104.822365719°	INSTALLATION DETAILS	DEPTH (Ft.)	
	DEPTH		WATER LEVEL OBSERVATIONS	
	SANDY LEAN CLAY WITH GRAVEL(CL) , medium grained, brown	Bentonite chips with riser pipe	2.9	
	6.0			
	POORLY GRADED SAND WITH GRAVEL(SP) , coarse grained, light brown	Riser pipe with sand pack	2.3	
	15.0			
	SANDY LEAN CLAY(CL) , fine grained, brown	Screen pack in sand	3.0	
	19.0			
	Probe Terminated at 19 Feet			
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Direct Push	Ground Surface Elevation 6142.55	Notes:		
Abandonment Method: Borings backfilled with bentonite upon completion.				
WATER LEVEL OBSERVATIONS		Probe Started: 7/16/2014	Probe Completed: 7/16/2014	
 14' During exploration		Drill Rig: DR009	Driller: Terracon	
		Project No.: 24149141	Exhibit: B-11	

PROBE LOG NO. TW-6

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY	
SITE: 112 E. 8th Avenue Cheyenne, WY			
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1541556472° Longitude: 104.822356831°	INSTALLATION DETAILS	DEPTH (Ft.)
DEPTH	0.3 <u>Asphalt - 4 inches</u> <u>SANDY LEAN CLAY WITH GRAVEL(CL)</u> , medium grained, dark brown	Bentonite chips with riser pipe	3.4
6.0	<u>POORLY GRADED SAND WITH GRAVEL(SP)</u> , coarse grained, light brown	Riser pipe with sand pack	5.8
15.0	<u>SANDY LEAN CLAY(CL)</u> , fine grained, brown	Screen pack in sand	3.5
19.0	Probe Terminated at 19 Feet		3.0
Stratification lines are approximate. In-situ, the transition may be gradual.			
Advancement Method: Direct Push	Ground Surface Elevation 6140.35	Notes:	
Abandonment Method: Borings backfilled with bentonite upon completion.			
WATER LEVEL OBSERVATIONS  13.5' During exploration		Probe Started: 7/16/2014	Probe Completed: 7/16/2014
		Drill Rig: DR009	Driller: Terracon
		Project No.: 24149141	Exhibit: B-12

PROBE LOG NO. TW-7

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1544365444° Longitude: 104.8222947°	INSTALLATION DETAILS	DEPTH (Ft.)	
DEPTH	0.3 ~ Asphalt - 4 inches <u>SANDY LEAN CLAY WITH GRAVEL(CL)</u> , medium grained, brown	Bentonite chips with riser pipe	0.8	
7.0	<u>POORLY GRADED SAND WITH GRAVEL(SP)</u> , coarse grained, light brown	Riser pipe with sand pack	1.1	
13.0	<u>SANDY LEAN CLAY(CL)</u> , fine grained, brown	Screen pack in sand	1.3	
19.0	Probe Terminated at 19 Feet		0.6	
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Direct Push	Ground Surface Elevation 6143.53	Notes:		
Abandonment Method: Borings backfilled with bentonite upon completion.				
WATER LEVEL OBSERVATIONS		Probe Started: 7/17/2014	Probe Completed: 7/17/2014	
 13.5' During exploration		Drill Rig: DR009	Driller: Terracon	
		Project No.: 24149141	Exhibit: B-13	

PROBE LOG NO. TW-8

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY	
SITE: 112 E. 8th Avenue Cheyenne, WY			
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1539736167° Longitude: 104.821552661°	INSTALLATION DETAILS	DEPTH (Ft.)
	DEPTH 	Bentonite chips with riser pipe Riser pipe with sand pack Screen pack in sand	WATER LEVEL OBSERVATIONS SAMPLE TYPE PID (ppm)
	SANDY LEAN CLAY WITH GRAVEL(CL) , medium grained, dark brown POORLY GRADED SAND WITH GRAVEL(SP) , coarse grained, light brown SANDY LEAN CLAY(CL) , fine grained, brown		1.3 2.8 1.7 404.1
	Probe Terminated at 19 Feet		
Stratification lines are approximate. In-situ, the transition may be gradual.			
Advancement Method: Direct Push	Ground Surface Elevation 6138.35	Notes:	
Abandonment Method: Borings backfilled with bentonite upon completion.			
WATER LEVEL OBSERVATIONS  13.5' During exploration		Probe Started: 7/17/2014	Probe Completed: 7/17/2014
		Drill Rig: DR009	Driller: Terracon
		Project No.: 24149141	Exhibit: B-14

PROBE LOG NO. TW-9

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY	
SITE: 112 E. 8th Avenue Cheyenne, WY			
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1535068583° Longitude: 104.821230972°	INSTALLATION DETAILS	DEPTH (Ft.)
DEPTH	SANDY LEAN CLAY WITH GRAVEL(CL) , medium grained, dark brown	Bentonite chips with riser pipe	2.1
10.0	POORLY GRADED SAND WITH GRAVEL(SP) , coarse grained, light brown	Riser pipe with sand pack	1.3
14.5	SANDY LEAN CLAY(CL) , fine grained, brown	Screen pack in sand	2.1
19.0	Probe Terminated at 19 Feet		0.8
Stratification lines are approximate. In-situ, the transition may be gradual.			
Advancement Method: Direct Push	Ground Surface Elevation 6140.79	Notes:	
Abandonment Method: Borings backfilled with bentonite upon completion.			
WATER LEVEL OBSERVATIONS		Probe Started: 7/17/2014	Probe Completed: 7/17/2014
13.5' During exploration		Drill Rig: DR009	Driller: Terracon
		Project No.: 24149141	Exhibit: B-15

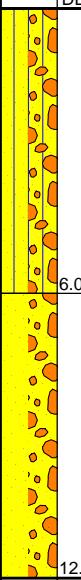
PROBE LOG NO. TW-10

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1529132667° Longitude: 104.821307633°	INSTALLATION DETAILS	DEPTH (Ft.)	
DEPTH			WATER LEVEL OBSERVATIONS	
0.5	SILTY SAND WITH GRAVEL(SM) , medium grained, dark brown		SAMPLE TYPE	
1.0	POORLY GRADED SAND WITH GRAVE(SP) , coarse grained, light brown		PID (ppm)	
	SANDY LEAN CLAY(CL) , fine grained, brown			
5.0	POORLY GRADED SAND WITH GRAVE(SP) , coarse grained, light brown	Bentonite chips with riser pipe	3.4	
13.5	SANDY LEAN CLAY(CL) , fine grained, brown	Riser pipe with sand pack	6.3	
24.0	Probe Terminated at 24 Feet	Screen pack in sand	4.8	
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Direct Push	Ground Surface Elevation 6138.66	Notes:		
Abandonment Method: Borings backfilled with bentonite upon completion.				
WATER LEVEL OBSERVATIONS		Probe Started: 7/17/2014	Probe Completed: 7/17/2014	
16' During exploration		Drill Rig: DR009	Driller: Terracon	
		Project No.: 24149141	Exhibit: B-16	

PROBE LOG NO. VP-1

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY	
SITE: 112 E. 8th Avenue Cheyenne, WY			
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1533706722° Longitude: 104.821953353°	INSTALLATION DETAILS	DEPTH (Ft.)
DEPTH		Top cap Bentonite chips with riser pipe Riser pipe with sand pack	WATER LEVEL OBSERVATIONS SAMPLE TYPE PID (ppm)
12.0	Probe Terminated at 12 Feet		
Stratification lines are approximate. In-situ, the transition may be gradual.			
Advancement Method: Direct Push	TOC Elevation 6141.64	Notes:	
Abandonment Method: Borings backfilled with bentonite upon completion.			
WATER LEVEL OBSERVATIONS		Probe Started: 7/16/2014	Probe Completed: 7/16/2014
		Drill Rig: DR009	Driller: Terracon
		Project No.: 24149141	Exhibit: B-17

PROBE LOG NO. VP-2

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1538254861° Longitude: 104.822147958°	INSTALLATION DETAILS	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS
DEPTH				SAMPLE TYPE
1.5	 Base Coarse coarse grained, brown	Top cap		
2.0	 POORLY GRADED SAND WITH GRAVEL(SP) , coarse grained, light brown	Bentonite chips with riser pipe	5	
4.0	 SANDY LEAN CLAY(CL) , fine grained, brown	Riser pipe with sand pack	10	
12.0	 POORLY GRADED SAND WITH GRAVEL(SP) , coarse grained, brown			  
Probe Terminated at 12 Feet				
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Direct Push	TOC Elevation TOC Elevation 6142.83	Notes:		
Abandonment Method: Borings backfilled with bentonite upon completion.				
WATER LEVEL OBSERVATIONS		Probe Started: 7/18/2014	Probe Completed: 7/18/2014	
		Drill Rig: DR009	Driller: Terracon	
		Project No.: 24149141	Exhibit: B-18	

PROBE LOG NO. VP-3

Page 1 of 1

PROJECT: Cheyenne Airport Addition		CLIENT: WYDEQ Cheyenne, WY		
SITE: 112 E. 8th Avenue Cheyenne, WY				
GRAPHIC LOG	LOCATION: See Exhibit A-2 Latitude: 41.1538636528° Longitude: 104.821814053°	INSTALLATION DETAILS	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS
DEPTH	0.5 <u>SILTY SAND WITH GRAVEL(SM)</u> , medium grained, brown <u>POORLY GRADED SAND WITH GRAVE(SP)</u> , coarse grained, light brown	Top cap		SAMPLE TYPE
5.5	5.5 <u>SANDY LEAN CLAY WITH GRAVE(CL)</u> , medium grained, light brown	Bentonite chips with riser pipe	5	PID (ppm)
12.0	12.0 Probe Terminated at 12 Feet	Riser pipe with sand pack	10	
Stratification lines are approximate. In-situ, the transition may be gradual.				
Advancement Method: Direct Push	6141.65	Notes:		
Abandonment Method: Borings backfilled with bentonite upon completion.				
WATER LEVEL OBSERVATIONS		Probe Started: 7/18/2014	Probe Completed: 7/18/2014	
		Drill Rig: DR009	Driller: Terracon	
		Project No.: 24149141	Exhibit: B-19	

APPENDIX D

Laboratory Data Reports



ChemSolutions

7388 S. Revere Parkway #806
Centennial, CO 80112
303.771.5570

August 13, 2014

Clay Muirhead
Terracon
1505 Old Happy Jack Road
Cheyenne, WY 82001

RE: TER036

Dear Clay,

Enclosed please find the analytical results for the Airport Project water and soil samples collected on 7/14-7/18/14.

Tables 1-33 contain the analytical results for the samples. The quality control samples are summarized in Tables 34-52.

Thank you for the opportunity to work on this project. Please call if you have any questions. The invoice will be sent separately.

Sincerely,

John Graves
Laboratory Director
ChemSolutions LLC

ChemSolutions LLC
Case Narrative
Project ID: TER036

Soil and water samples were analyzed by EPA methods 8260C and 8015C. The analyses are method compliant with the following exception:

On 7/16-7/17/14, background contamination was detected in the samples and the associated quality control for volatile organic compounds (VOCs) using EPA Method 8260C. The analyte contamination was acetone and methylene chloride. The source of contamination was determined to be the pre-cleaned vials used in the analysis. Once the source of contamination was removed, all samples with acetone and methylene chloride detections were re-analyzed with one exception. It was not possible to re-analyze water sample TW-7 because there were no unopened 40mL sample vials. TW-7 has detections for acetone and methylene. These detections are suspect due to the presence of acetone and methylene chloride in the method blank.

ChemSolutions LLC
TABLE 1 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-1

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/14/14

Date Received: 7/15/14

Date Analyzed: 7/16/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	106
1,2-Dichloroethane-D4	110
Toluene-D8	98.9
Bromofluorobenzene	94.2

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC

TABLE 1 (Page 2 of 2)

SAMPLE RESULTS

Project ID: TER036

Client Sample ID: MW-1

Client Project ID: 24149141 Airport

Date Sampled: 7/14/14

Date Received: 7/15/14

Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/21/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/21/2014	8015C
Arsenic	ND	10.0	ug/L	7/17/2014	6010C
Barium	322	10.0	ug/L	7/17/2014	6010C
Cadmium	ND	5.0	ug/L	7/17/2014	6010C
Chromium	ND	5.0	ug/L	7/17/2014	6010C
Lead	ND	5.0	ug/L	7/17/2014	6010C
Selenium	ND	15.0	ug/L	7/17/2014	6010C
Silver	ND	7.0	ug/L	7/17/2014	6010C
Mercury	ND	0.20	ug/L	7/18/2014	7470

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
1-chlorooctane	108	8015C-GRO
1-chlorooctadecane	55.2	8015C-DRO

ND= Not detected at or above the reporting limit.

Metals analyses performed by Pace.

ChemSolutions LLC
TABLE 2
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-4

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	15	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	117
1,2-Dichloroethane-D4	120
Toluene-D8	104
Bromofluorobenzene	104

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 3
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-3

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	23	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	109
1,2-Dichloroethane-D4	120
Toluene-D8	108
Bromofluorobenzene	106

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 4
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-5

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	27	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	111
1,2-Dichloroethane-D4	128
Toluene-D8	110
Bromofluorobenzene	106

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 5
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-6

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	96.6
1,2-Dichloroethane-D4	94.6
Toluene-D8	105
Bromofluorobenzene	98.1

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 6
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-7

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/17/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	94 B	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	23 B	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	108
1,2-Dichloroethane-D4	105
Toluene-D8	104
Bromofluorobenzene	90.8

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

B= Analyte detected in the method blank.

ChemSolutions LLC
TABLE 7
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-1

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	110
1,2-Dichloroethane-D4	113
Toluene-D8	105
Bromofluorobenzene	105

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 8
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-8

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	Reporting			<u>Analyte</u>	Reporting		
	<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>		<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	5	0.453	trans-1,3-Dichloropropene	ND J1	5	0.212
Chloromethane	ND	5	0.510	1,1,2-Trichloroethane	ND	2	0.257
Vinyl Chloride	ND	2	0.798	Tetrachloroethene	ND	2	0.678
Bromomethane	ND	5	0.460	Dibromochloromethane	ND	5	0.398
Chloroethane	ND	5	0.557	1,2-Dibromoethane	ND	5	0.312
Trichlorofluoromethane	ND	5	0.674	Chlorobenzene	ND	2	0.156
Acetone	ND	20	0.627	1,1,1,2-Tetrachloroethane	ND	5	0.413
1,1-Dichloroethene	ND	5	0.256	Ethylbenzene	ND	5	0.251
Carbon Disulfide	ND	5	0.367	Total Xylene	ND	5	0.523
Methyl-tert-butyl ether	ND	2	1.252	Styrene	ND	5	0.344
Methylene Chloride	ND	5	0.511	Isopropylbenzene	ND	5	0.315
trans-1,2-Dichloroethene	ND	2	0.601	Bromoform	ND	5	0.628
1,1-Dichloroethane	ND	2	0.440	n-Propylbenzene	ND	5	0.300
Vinyl acetate	ND	10	1.006	1,2,3-Trichloropropane	ND	5	0.501
2-Butanone	ND	10	1.077	2-Chlorotoluene	ND	5	0.572
cis-1,2-Dichloroethene	ND	2	0.404	1,3,5-Trimethylbenzene	ND	5	0.351
Chloroform	ND	5	0.343	4-Chlorotoluene	ND	5	0.195
Tetrahydrofuran	ND	10	0.910	t-Butylbenzene	ND	5	0.242
1,1,1-Trichloroethane	ND	2	0.381	1,2,4-Trimethylbenzene	ND	5	0.263
Carbon Tetrachloride	ND	2	0.598	sec-Butylbenzene	ND	5	0.413
Benzene	ND	2	0.417	p-Isopropyltoluene	ND	5	0.285
1,2-Dichloroethane	ND	2	0.341	1,1,2,2-Tetrachloroethane	ND J1	5	0.477
Trichloroethene	3.0	2	0.270	1,3-Dichlorobenzene	ND	5	0.215
1,2-Dichloropropane	ND	5	0.295	1,4-Dichlorobenzene	ND	5	0.213
Dibromomethane	ND	5	0.383	n-Butylbenzene	ND	5	0.305
Bromodichloromethane	ND	5	0.199	1,2 Dichlorobenzene	ND	5	0.345
cis-1,3-Dichloropropene	ND J1	2	0.228	1,2-Dibromo-3-chloropropane	ND	5	0.877
4-Methyl-2-pentanone	ND	10	1.249	1,2,4-Trichlorobenzene	ND	5	0.223
Toluene	ND	5	0.279	Hexachlorobutadiene	ND	5	0.537
2-Hexanone	ND	10	1.413	1,2,3-Trichlorobenzene	ND	5	0.392
				Naphthalene	ND	5	0.320

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	110
1,2-Dichloroethane-D4	105
Toluene-D8	105
Bromofluorobenzene	105

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 9
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-9

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	120	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	20	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	109
1,2-Dichloroethane-D4	125
Toluene-D8	109
Bromofluorobenzene	102

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 10
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-4

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	45	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	26	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	5.9	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	14	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

Surrogate % Recovery

Dibromofluoromethane	113
1,2-Dichloroethane-D4	122
Toluene-D8	111
Bromofluorobenzene	120

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 11
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-2

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	110
1,2-Dichloroethane-D4	113
Toluene-D8	109
Bromofluorobenzene	109

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 12
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-10

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	113
1,2-Dichloroethane-D4	122
Toluene-D8	110
Bromofluorobenzene	109

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 13
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-5

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	114
1,2-Dichloroethane-D4	132
Toluene-D8	106
Bromofluorobenzene	105

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 14
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-2

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/18/14

Date Received: 7/18/14

Date Analyzed: 7/24/14

Sample Matrix: Water

<u>Analyte</u>	Reporting			<u>Analyte</u>	Reporting		
	<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>		<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	5	0.453	trans-1,3-Dichloropropene	ND J1	5	0.212
Chloromethane	ND	5	0.510	1,1,2-Trichloroethane	ND	2	0.257
Vinyl Chloride	ND	2	0.798	Tetrachloroethene	43	2	0.678
Bromomethane	ND	5	0.460	Dibromochloromethane	ND	5	0.398
Chloroethane	ND	5	0.557	1,2-Dibromoethane	ND	5	0.312
Trichlorofluoromethane	ND	5	0.674	Chlorobenzene	ND	2	0.156
Acetone	ND	20	0.627	1,1,1,2-Tetrachloroethane	ND	5	0.413
1,1-Dichloroethene	ND	5	0.256	Ethylbenzene	ND	5	0.251
Carbon Disulfide	ND	5	0.367	Total Xylene	ND	5	0.523
Methyl-tert-butyl ether	ND	2	1.252	Styrene	ND	5	0.344
Methylene Chloride	ND	5	0.511	Isopropylbenzene	ND	5	0.315
trans-1,2-Dichloroethene	ND	2	0.601	Bromoform	ND	5	0.628
1,1-Dichloroethane	ND	2	0.440	n-Propylbenzene	ND	5	0.300
Vinyl acetate	ND	10	1.006	1,2,3-Trichloropropane	ND	5	0.501
2-Butanone	ND	10	1.077	2-Chlorotoluene	ND	5	0.572
cis-1,2-Dichloroethene	ND	2	0.404	1,3,5-Trimethylbenzene	ND	5	0.351
Chloroform	ND	5	0.343	4-Chlorotoluene	ND	5	0.195
Tetrahydrofuran	ND	10	0.910	t-Butylbenzene	ND	5	0.242
1,1,1-Trichloroethane	ND	2	0.381	1,2,4-Trimethylbenzene	ND	5	0.263
Carbon Tetrachloride	ND	2	0.598	sec-Butylbenzene	ND	5	0.413
Benzene	ND	2	0.417	p-Isopropyltoluene	ND	5	0.285
1,2-Dichloroethane	ND	2	0.341	1,1,2,2-Tetrachloroethane	ND J1	5	0.477
Trichloroethene	ND	2	0.270	1,3-Dichlorobenzene	ND	5	0.215
1,2-Dichloropropane	ND	5	0.295	1,4-Dichlorobenzene	ND	5	0.213
Dibromomethane	ND	5	0.383	n-Butylbenzene	ND	5	0.305
Bromodichloromethane	ND	5	0.199	1,2 Dichlorobenzene	ND	5	0.345
cis-1,3-Dichloropropene	ND J1	2	0.228	1,2-Dibromo-3-chloropropane	ND	5	0.877
4-Methyl-2-pentanone	ND	10	1.249	1,2,4-Trichlorobenzene	ND	5	0.223
Toluene	ND	5	0.279	Hexachlorobutadiene	ND	5	0.537
2-Hexanone	ND	10	1.413	1,2,3-Trichlorobenzene	ND	5	0.392
				Naphthalene	ND	5	0.320

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	110
1,2-Dichloroethane-D4	116
Toluene-D8	108
Bromofluorobenzene	108

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 15
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-1

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/16/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	45	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	121
1,2-Dichloroethane-D4	124
Toluene-D8	128
Bromofluorobenzene	108

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 16
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-2

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/16/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	117
1,2-Dichloroethane-D4	121
Toluene-D8	103
Bromofluorobenzene	101

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 17
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-3

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/16/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	122
1,2-Dichloroethane-D4	127
Toluene-D8	103
Bromofluorobenzene	98.5

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 18
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-4

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/16/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	123
1,2-Dichloroethane-D4	129
Toluene-D8	104
Bromofluorobenzene	98.2

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 19
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-5

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/16/14

Date Received: 7/17/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	118
1,2-Dichloroethane-D4	123
Toluene-D8	102
Bromofluorobenzene	98.2

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 20
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-6

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/16/14

Date Received: 7/17/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	126
1,2-Dichloroethane-D4	132
Toluene-D8	102
Bromofluorobenzene	96.4

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 21
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-7

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/16/14

Date Received: 7/17/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	123
1,2-Dichloroethane-D4	129
Toluene-D8	102
Bromofluorobenzene	94.9

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 22
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: VP-1

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/16/14

Date Received: 7/17/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	121
1,2-Dichloroethane-D4	117
Toluene-D8	107
Bromofluorobenzene	91.7

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 23
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-8

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

Surrogate % Recovery

Dibromofluoromethane	125
1,2-Dichloroethane-D4	129
Toluene-D8	105
Bromofluorobenzene	96.6

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 24
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-10

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	128
1,2-Dichloroethane-D4	134
Toluene-D8	104
Bromofluorobenzene	96.4

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 25 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-4

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	Reporting			<u>Analyte</u>	Reporting		
	<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>		<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	5	2.350	trans-1,3-Dichloropropene	ND J1	2	0.834
Chloromethane	ND	5	2.032	1,1,2-Trichloroethane	ND J1	2	0.980
Vinyl Chloride	ND J1	2	1.243	Tetrachloroethene	ND	2	0.929
Bromomethane	ND	5	0.868	Dibromochloromethane	ND	5	0.588
Chloroethane	ND	5	0.936	1,2-Dibromoethane	ND	5	0.712
Trichlorofluoromethane	ND	5	0.830	Chlorobenzene	ND	2	0.424
Acetone	ND	20	4.537	1,1,1,2-Tetrachloroethane	ND	5	0.698
1,1-Dichloroethene	ND	2	1.101	Ethylbenzene	ND	5	0.381
Carbon Disulfide	ND	5	0.674	Total Xylene	ND	5	0.857
Methyl-tert-butyl ether	ND	2	0.399	Styrene	ND	5	1.106
Methylene Chloride	ND J1	2	4.219	Isopropylbenzene	ND	5	0.811
trans-1,2-Dichloroethene	ND	2	0.453	Bromoform	ND	5	0.669
1,1-Dichloroethane	ND	2	0.467	n-Propylbenzene	ND	5	0.828
Vinyl acetate	ND	10	3.169	1,2,3-Trichloropropane	ND	5	1.199
2-Butanone	ND	10	2.399	2-Chlorotoluene	ND	5	0.852
cis-1,2-Dichloroethene	ND	2	0.588	1,3,5-Trimethylbenzene	ND	5	0.988
Chloroform	ND	5	0.422	4-Chlorotoluene	ND	5	0.865
Tetrahydrofuran	ND	10	2.211	t-Butylbenzene	ND	5	0.848
1,1,1-Trichloroethane	ND	2	0.653	1,2,4-Trimethylbenzene	ND	5	1.891
Carbon Tetrachloride	ND	2	0.497	sec-Butylbenzene	ND	5	0.627
Benzene	ND J1	2	0.420	p-Isopropyltoluene	ND	5	0.281
1,2-Dichloroethane	ND J1	2	0.440	1,1,2,2-Tetrachloroethane	ND J1	2	1.176
Trichloroethene	ND	2	0.691	1,3-Dichlorobenzene	ND	5	0.772
1,2-Dichloropropane	ND J1	2	0.712	1,4-Dichlorobenzene	ND	5	0.654
Dibromomethane	ND	5	0.272	n-Butylbenzene	ND	5	0.550
Bromodichloromethane	ND	5	0.514	1,2 Dichlorobenzene	ND	5	0.786
cis-1,3-Dichloropropene	ND J1	2	0.581	1,2-Dibromo-3-chloropropane	ND	5	1.937
4-Methyl-2-pentanone	ND	10	2.713	1,2,4-Trichlorobenzene	ND	5	0.780
Toluene	ND	5	1.059	Hexachlorobutadiene	ND	5	1.040
2-Hexanone	ND	10	2.873	1,2,3-Trichlorobenzene	ND	5	1.105
				Naphthalene	ND	5	1.095

Surrogate % Recovery

Dibromofluoromethane	121
1,2-Dichloroethane-D4	124
Toluene-D8	102
Bromofluorobenzene	94.9

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 25 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER036

Client Sample ID: MW-4
Client Project ID: 24149141 Airport
Dry Weight Basis

Date Sampled: 7/17/14
Date Received: 7/17/14
Sample Matrix: Soil

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/Kg	7/24/2014	8015C
TPH-DRO	ND	5	mg/Kg	7/24/2014	8015C
Arsenic	2.6	0.87	mg/Kg	7/29/2014	6010C
Barium	47.8	0.87	mg/Kg	7/29/2014	6010C
Cadmium	ND	0.44	mg/Kg	7/29/2014	6010C
Chromium	6.1	0.44	mg/Kg	7/29/2014	6010C
Lead	5.1	0.44	mg/Kg	7/29/2014	6010C
Selenium	ND	1.3	mg/Kg	7/29/2014	6010C
Silver	ND	0.61	mg/Kg	7/29/2014	6010C
Mercury	ND	0.055	mg/Kg	7/29/2014	7471
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane	79.8		8015C-GRO		
1-chlorooctadecane	103		8015C-DRO		

ND= Not detected at or above the reporting limit.

Metals analyses performed by Pace.

ChemSolutions LLC
TABLE 26
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: TW-9

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	Reporting			<u>Analyte</u>	Reporting		
	<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>		<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	5	2.350	trans-1,3-Dichloropropene	ND J1	2	0.834
Chloromethane	ND	5	2.032	1,1,2-Trichloroethane	ND J1	2	0.980
Vinyl Chloride	ND J1	2	1.243	Tetrachloroethene	ND	2	0.929
Bromomethane	ND	5	0.868	Dibromochloromethane	ND	5	0.588
Chloroethane	ND	5	0.936	1,2-Dibromoethane	ND	5	0.712
Trichlorofluoromethane	ND	5	0.830	Chlorobenzene	ND	2	0.424
Acetone	ND	20	4.537	1,1,1,2-Tetrachloroethane	ND	5	0.698
1,1-Dichloroethene	ND	2	1.101	Ethylbenzene	ND	5	0.381
Carbon Disulfide	ND	5	0.674	Total Xylene	ND	5	0.857
Methyl-tert-butyl ether	ND	2	0.399	Styrene	ND	5	1.106
Methylene Chloride	ND J1	2	4.219	Isopropylbenzene	ND	5	0.811
trans-1,2-Dichloroethene	ND	2	0.453	Bromoform	ND	5	0.669
1,1-Dichloroethane	ND	2	0.467	n-Propylbenzene	ND	5	0.828
Vinyl acetate	ND	10	3.169	1,2,3-Trichloropropane	ND	5	1.199
2-Butanone	ND	10	2.399	2-Chlorotoluene	ND	5	0.852
cis-1,2-Dichloroethene	ND	2	0.588	1,3,5-Trimethylbenzene	ND	5	0.988
Chloroform	ND	5	0.422	4-Chlorotoluene	ND	5	0.865
Tetrahydrofuran	ND	10	2.211	t-Butylbenzene	ND	5	0.848
1,1,1-Trichloroethane	ND	2	0.653	1,2,4-Trimethylbenzene	ND	5	1.891
Carbon Tetrachloride	ND	2	0.497	sec-Butylbenzene	ND	5	0.627
Benzene	ND J1	2	0.420	p-Isopropyltoluene	ND	5	0.281
1,2-Dichloroethane	ND J1	2	0.440	1,1,2,2-Tetrachloroethane	ND J1	2	1.176
Trichloroethene	ND	2	0.691	1,3-Dichlorobenzene	ND	5	0.772
1,2-Dichloropropane	ND J1	2	0.712	1,4-Dichlorobenzene	ND	5	0.654
Dibromomethane	ND	5	0.272	n-Butylbenzene	ND	5	0.550
Bromodichloromethane	ND	5	0.514	1,2 Dichlorobenzene	ND	5	0.786
cis-1,3-Dichloropropene	ND J1	2	0.581	1,2-Dibromo-3-chloropropane	ND	5	1.937
4-Methyl-2-pentanone	ND	10	2.713	1,2,4-Trichlorobenzene	ND	5	0.780
Toluene	ND	5	1.059	Hexachlorobutadiene	ND	5	1.040
2-Hexanone	ND	10	2.873	1,2,3-Trichlorobenzene	ND	5	1.105
				Naphthalene	ND	5	1.095

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	130
1,2-Dichloroethane-D4	129
Toluene-D8	105
Bromofluorobenzene	95.8

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 27 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-5

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

Surrogate % Recovery

Dibromofluoromethane	129
1,2-Dichloroethane-D4	133
Toluene-D8	102
Bromofluorobenzene	94.9

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 27 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER036

Client Sample ID: MW-5
Client Project ID: 24149141 Airport
Dry Weight Basis

Date Sampled: 7/17/14
Date Received: 7/17/14
Sample Matrix: Soil

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/Kg	7/24/2014	8015C
TPH-DRO	ND	5	mg/Kg	7/24/2014	8015C
Arsenic	2.3	0.73	mg/Kg	7/29/2014	6010C
Barium	52.7	0.73	mg/Kg	7/29/2014	6010C
Cadmium	ND	0.37	mg/Kg	7/29/2014	6010C
Chromium	1.4	0.37	mg/Kg	7/29/2014	6010C
Lead	2.7	0.37	mg/Kg	7/29/2014	6010C
Selenium	ND	1.1	mg/Kg	7/29/2014	6010C
Silver	ND	0.51	mg/Kg	7/29/2014	6010C
Mercury	ND	0.045	mg/Kg	7/29/2014	7471
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane	86.4		8015C-GRO		
1-chlorooctadecane	98.2		8015C-DRO		

ND= Not detected at or above the reporting limit.

Metals analyses performed by Pace.

ChemSolutions LLC
TABLE 28 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-6

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/17/14

Date Received: 7/17/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	Reporting			<u>Analyte</u>	Reporting		
	<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>		<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	5	2.350	trans-1,3-Dichloropropene	ND J1	2	0.834
Chloromethane	ND	5	2.032	1,1,2-Trichloroethane	ND J1	2	0.980
Vinyl Chloride	ND J1	2	1.243	Tetrachloroethene	ND	2	0.929
Bromomethane	ND	5	0.868	Dibromochloromethane	ND	5	0.588
Chloroethane	ND	5	0.936	1,2-Dibromoethane	ND	5	0.712
Trichlorofluoromethane	ND	5	0.830	Chlorobenzene	ND	2	0.424
Acetone	ND	20	4.537	1,1,1,2-Tetrachloroethane	ND	5	0.698
1,1-Dichloroethene	ND	2	1.101	Ethylbenzene	ND	5	0.381
Carbon Disulfide	ND	5	0.674	Total Xylene	ND	5	0.857
Methyl-tert-butyl ether	ND	2	0.399	Styrene	ND	5	1.106
Methylene Chloride	ND J1	2	4.219	Isopropylbenzene	ND	5	0.811
trans-1,2-Dichloroethene	ND	2	0.453	Bromoform	ND	5	0.669
1,1-Dichloroethane	ND	2	0.467	n-Propylbenzene	ND	5	0.828
Vinyl acetate	ND	10	3.169	1,2,3-Trichloropropane	ND	5	1.199
2-Butanone	ND	10	2.399	2-Chlorotoluene	ND	5	0.852
cis-1,2-Dichloroethene	ND	2	0.588	1,3,5-Trimethylbenzene	ND	5	0.988
Chloroform	ND	5	0.422	4-Chlorotoluene	ND	5	0.865
Tetrahydrofuran	ND	10	2.211	t-Butylbenzene	ND	5	0.848
1,1,1-Trichloroethane	ND	2	0.653	1,2,4-Trimethylbenzene	ND	5	1.891
Carbon Tetrachloride	ND	2	0.497	sec-Butylbenzene	ND	5	0.627
Benzene	ND J1	2	0.420	p-Isopropyltoluene	ND	5	0.281
1,2-Dichloroethane	ND J1	2	0.440	1,1,2,2-Tetrachloroethane	ND J1	2	1.176
Trichloroethene	ND	2	0.691	1,3-Dichlorobenzene	ND	5	0.772
1,2-Dichloropropane	ND J1	2	0.712	1,4-Dichlorobenzene	ND	5	0.654
Dibromomethane	ND	5	0.272	n-Butylbenzene	ND	5	0.550
Bromodichloromethane	ND	5	0.514	1,2 Dichlorobenzene	ND	5	0.786
cis-1,3-Dichloropropene	ND J1	2	0.581	1,2-Dibromo-3-chloropropane	ND	5	1.937
4-Methyl-2-pentanone	ND	10	2.713	1,2,4-Trichlorobenzene	ND	5	0.780
Toluene	ND	5	1.059	Hexachlorobutadiene	ND	5	1.040
2-Hexanone	ND	10	2.873	1,2,3-Trichlorobenzene	ND	5	1.105
				Naphthalene	ND	5	1.095

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	127
1,2-Dichloroethane-D4	131
Toluene-D8	104
Bromofluorobenzene	94.7

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 28 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER036

Client Sample ID: MW-6
Client Project ID: 24149141 Airport
Dry Weight Basis

Date Sampled: 7/17/14
Date Received: 7/17/14
Sample Matrix: Soil

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/Kg	7/24/2014	8015C
TPH-DRO	ND	5	mg/Kg	7/24/2014	8015C
Arsenic	3.4	0.85	mg/Kg	7/29/2014	6010C
Barium	70.9	0.85	mg/Kg	7/29/2014	6010C
Cadmium	ND	0.42	mg/Kg	7/29/2014	6010C
Chromium	8.0	0.42	mg/Kg	7/29/2014	6010C
Lead	8.0	0.42	mg/Kg	7/29/2014	6010C
Selenium	ND	1.3	mg/Kg	7/29/2014	6010C
Silver	ND	0.59	mg/Kg	7/29/2014	6010C
Mercury	ND	0.056	mg/Kg	7/29/2014	7471
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane	77.7		8015C-GRO		
1-chlorooctadecane	95.7		8015C-DRO		

ND= Not detected at or above the reporting limit.

Metals analyses performed by Pace.

ChemSolutions LLC
TABLE 29 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-7

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/18/14

Date Received: 7/18/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

Surrogate % Recovery

Dibromofluoromethane	121
1,2-Dichloroethane-D4	125
Toluene-D8	104
Bromofluorobenzene	95.0

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 29 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER036

Client Sample ID: MW-7
Client Project ID: 24149141 Airport
Dry Weight Basis

Date Sampled: 7/18/14
Date Received: 7/18/14
Sample Matrix: Soil

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/Kg	7/24/2014	8015C
TPH-DRO	ND	5	mg/Kg	7/24/2014	8015C
Arsenic	1.7	0.87	mg/Kg	7/29/2014	6010C
Barium	52.0	0.87	mg/Kg	7/29/2014	6010C
Cadmium	ND	0.43	mg/Kg	7/29/2014	6010C
Chromium	1.4	0.43	mg/Kg	7/29/2014	6010C
Lead	2.4	0.43	mg/Kg	7/29/2014	6010C
Selenium	ND	1.3	mg/Kg	7/29/2014	6010C
Silver	ND	0.61	mg/Kg	7/29/2014	6010C
Mercury	ND	0.051	mg/Kg	7/29/2014	7471
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane	90.8		8015C-GRO		
1-chlorooctadecane	99.2		8015C-DRO		

ND= Not detected at or above the reporting limit.

Metals analyses performed by Pace.

ChemSolutions LLC
TABLE 30
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: VP-2

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/18/14

Date Received: 7/18/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	Reporting			<u>Analyte</u>	Reporting		
	<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>		<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	5	2.350	trans-1,3-Dichloropropene	ND J1	2	0.834
Chloromethane	ND	5	2.032	1,1,2-Trichloroethane	ND J1	2	0.980
Vinyl Chloride	ND J1	2	1.243	Tetrachloroethene	ND	2	0.929
Bromomethane	ND	5	0.868	Dibromochloromethane	ND	5	0.588
Chloroethane	ND	5	0.936	1,2-Dibromoethane	ND	5	0.712
Trichlorofluoromethane	ND	5	0.830	Chlorobenzene	ND	2	0.424
Acetone	ND	20	4.537	1,1,1,2-Tetrachloroethane	ND	5	0.698
1,1-Dichloroethene	ND	2	1.101	Ethylbenzene	ND	5	0.381
Carbon Disulfide	ND	5	0.674	Total Xylene	ND	5	0.857
Methyl-tert-butyl ether	ND	2	0.399	Styrene	ND	5	1.106
Methylene Chloride	ND J1	2	4.219	Isopropylbenzene	ND	5	0.811
trans-1,2-Dichloroethene	ND	2	0.453	Bromoform	ND	5	0.669
1,1-Dichloroethane	ND	2	0.467	n-Propylbenzene	ND	5	0.828
Vinyl acetate	ND	10	3.169	1,2,3-Trichloropropane	ND	5	1.199
2-Butanone	ND	10	2.399	2-Chlorotoluene	ND	5	0.852
cis-1,2-Dichloroethene	ND	2	0.588	1,3,5-Trimethylbenzene	ND	5	0.988
Chloroform	ND	5	0.422	4-Chlorotoluene	ND	5	0.865
Tetrahydrofuran	ND	10	2.211	t-Butylbenzene	ND	5	0.848
1,1,1-Trichloroethane	ND	2	0.653	1,2,4-Trimethylbenzene	ND	5	1.891
Carbon Tetrachloride	ND	2	0.497	sec-Butylbenzene	ND	5	0.627
Benzene	ND J1	2	0.420	p-Isopropyltoluene	ND	5	0.281
1,2-Dichloroethane	ND J1	2	0.440	1,1,2,2-Tetrachloroethane	ND J1	2	1.176
Trichloroethene	ND	2	0.691	1,3-Dichlorobenzene	ND	5	0.772
1,2-Dichloropropane	ND J1	2	0.712	1,4-Dichlorobenzene	ND	5	0.654
Dibromomethane	ND	5	0.272	n-Butylbenzene	ND	5	0.550
Bromodichloromethane	ND	5	0.514	1,2 Dichlorobenzene	ND	5	0.786
cis-1,3-Dichloropropene	ND J1	2	0.581	1,2-Dibromo-3-chloropropane	ND	5	1.937
4-Methyl-2-pentanone	ND	10	2.713	1,2,4-Trichlorobenzene	ND	5	0.780
Toluene	ND	5	1.059	Hexachlorobutadiene	ND	5	1.040
2-Hexanone	ND	10	2.873	1,2,3-Trichlorobenzene	ND	5	1.105
				Naphthalene	ND	5	1.095

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	130
1,2-Dichloroethane-D4	133
Toluene-D8	107
Bromofluorobenzene	95.6

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 31 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-8

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/18/14

Date Received: 7/18/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

Surrogate % Recovery

Dibromofluoromethane	129
1,2-Dichloroethane-D4	135
Toluene-D8	106
Bromofluorobenzene	96.0

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 31 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER036

Client Sample ID: MW-8
Client Project ID: 24149141 Airport
Dry Weight Basis

Date Sampled: 7/18/14
Date Received: 7/18/14
Sample Matrix: Soil

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/Kg	7/24/2014	8015C
TPH-DRO	ND	5	mg/Kg	7/24/2014	8015C
Arsenic	2.3	0.84	mg/Kg	7/29/2014	6010C
Barium	45.6	0.84	mg/Kg	7/29/2014	6010C
Cadmium	ND	0.42	mg/Kg	7/29/2014	6010C
Chromium	7.7	0.42	mg/Kg	7/29/2014	6010C
Lead	4.2	0.42	mg/Kg	7/29/2014	6010C
Selenium	ND	1.3	mg/Kg	7/29/2014	6010C
Silver	ND	0.59	mg/Kg	7/29/2014	6010C
Mercury	ND	0.044	mg/Kg	7/29/2014	7471
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane	79.7		8015C-GRO		
1-chlorooctadecane	101		8015C-DRO		

ND= Not detected at or above the reporting limit.

Metals analyses performed by Pace.

ChemSolutions LLC
TABLE 32
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: VP-3

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/18/14

Date Received: 7/18/14

Date Analyzed: 7/25/14

Sample Matrix: Soil

<u>Analyte</u>	Reporting			<u>Analyte</u>	Reporting		
	<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>		<u>Concentration</u>	<u>Limit</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	5	2.350	trans-1,3-Dichloropropene	ND J1	2	0.834
Chloromethane	ND	5	2.032	1,1,2-Trichloroethane	ND J1	2	0.980
Vinyl Chloride	ND J1	2	1.243	Tetrachloroethene	6.3	2	0.929
Bromomethane	ND	5	0.868	Dibromochloromethane	ND	5	0.588
Chloroethane	ND	5	0.936	1,2-Dibromoethane	ND	5	0.712
Trichlorofluoromethane	ND	5	0.830	Chlorobenzene	ND	2	0.424
Acetone	ND	20	4.537	1,1,1,2-Tetrachloroethane	ND	5	0.698
1,1-Dichloroethene	ND	2	1.101	Ethylbenzene	ND	5	0.381
Carbon Disulfide	ND	5	0.674	Total Xylene	ND	5	0.857
Methyl-tert-butyl ether	ND	2	0.399	Styrene	ND	5	1.106
Methylene Chloride	ND J1	2	4.219	Isopropylbenzene	ND	5	0.811
trans-1,2-Dichloroethene	ND	2	0.453	Bromoform	ND	5	0.669
1,1-Dichloroethane	ND	2	0.467	n-Propylbenzene	ND	5	0.828
Vinyl acetate	ND	10	3.169	1,2,3-Trichloropropane	ND	5	1.199
2-Butanone	ND	10	2.399	2-Chlorotoluene	ND	5	0.852
cis-1,2-Dichloroethene	ND	2	0.588	1,3,5-Trimethylbenzene	ND	5	0.988
Chloroform	ND	5	0.422	4-Chlorotoluene	ND	5	0.865
Tetrahydrofuran	ND	10	2.211	t-Butylbenzene	ND	5	0.848
1,1,1-Trichloroethane	ND	2	0.653	1,2,4-Trimethylbenzene	ND	5	1.891
Carbon Tetrachloride	ND	2	0.497	sec-Butylbenzene	ND	5	0.627
Benzene	ND J1	2	0.420	p-Isopropyltoluene	ND	5	0.281
1,2-Dichloroethane	ND J1	2	0.440	1,1,2,2-Tetrachloroethane	ND J1	2	1.176
Trichloroethene	ND	2	0.691	1,3-Dichlorobenzene	ND	5	0.772
1,2-Dichloropropane	ND J1	2	0.712	1,4-Dichlorobenzene	ND	5	0.654
Dibromomethane	ND	5	0.272	n-Butylbenzene	ND	5	0.550
Bromodichloromethane	ND	5	0.514	1,2 Dichlorobenzene	ND	5	0.786
cis-1,3-Dichloropropene	ND J1	2	0.581	1,2-Dibromo-3-chloropropane	ND	5	1.937
4-Methyl-2-pentanone	ND	10	2.713	1,2,4-Trichlorobenzene	ND	5	0.780
Toluene	ND	5	1.059	Hexachlorobutadiene	ND	5	1.040
2-Hexanone	ND	10	2.873	1,2,3-Trichlorobenzene	ND	5	1.105
				Naphthalene	ND	5	1.095

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	132
1,2-Dichloroethane-D4	138
Toluene-D8	105
Bromofluorobenzene	97.5

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 33 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER036

Client Sample ID: MW-9

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/Kg

Date Sampled: 7/18/14

Date Received: 7/18/14

Date Analyzed: 7/24/14

Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	2.350		trans-1,3-Dichloropropene	ND J1	2	0.834	
Chloromethane	ND	5	2.032		1,1,2-Trichloroethane	ND J1	2	0.980	
Vinyl Chloride	ND J1	2	1.243		Tetrachloroethene	ND	2	0.929	
Bromomethane	ND	5	0.868		Dibromochloromethane	ND	5	0.588	
Chloroethane	ND	5	0.936		1,2-Dibromoethane	ND	5	0.712	
Trichlorofluoromethane	ND	5	0.830		Chlorobenzene	ND	2	0.424	
Acetone	ND	20	4.537		1,1,1,2-Tetrachloroethane	ND	5	0.698	
1,1-Dichloroethene	ND	2	1.101		Ethylbenzene	ND	5	0.381	
Carbon Disulfide	ND	5	0.674		Total Xylene	ND	5	0.857	
Methyl-tert-butyl ether	ND	2	0.399		Styrene	ND	5	1.106	
Methylene Chloride	ND J1	2	4.219		Isopropylbenzene	ND	5	0.811	
trans-1,2-Dichloroethene	ND	2	0.453		Bromoform	ND	5	0.669	
1,1-Dichloroethane	ND	2	0.467		n-Propylbenzene	ND	5	0.828	
Vinyl acetate	ND	10	3.169		1,2,3-Trichloropropane	ND	5	1.199	
2-Butanone	ND	10	2.399		2-Chlorotoluene	ND	5	0.852	
cis-1,2-Dichloroethene	ND	2	0.588		1,3,5-Trimethylbenzene	ND	5	0.988	
Chloroform	ND	5	0.422		4-Chlorotoluene	ND	5	0.865	
Tetrahydrofuran	ND	10	2.211		t-Butylbenzene	ND	5	0.848	
1,1,1-Trichloroethane	ND	2	0.653		1,2,4-Trimethylbenzene	ND	5	1.891	
Carbon Tetrachloride	ND	2	0.497		sec-Butylbenzene	ND	5	0.627	
Benzene	ND J1	2	0.420		p-Isopropyltoluene	ND	5	0.281	
1,2-Dichloroethane	ND J1	2	0.440		1,1,2,2-Tetrachloroethane	ND J1	2	1.176	
Trichloroethene	ND	2	0.691		1,3-Dichlorobenzene	ND	5	0.772	
1,2-Dichloropropane	ND J1	2	0.712		1,4-Dichlorobenzene	ND	5	0.654	
Dibromomethane	ND	5	0.272		n-Butylbenzene	ND	5	0.550	
Bromodichloromethane	ND	5	0.514		1,2 Dichlorobenzene	ND	5	0.786	
cis-1,3-Dichloropropene	ND J1	2	0.581		1,2-Dibromo-3-chloropropane	ND	5	1.937	
4-Methyl-2-pentanone	ND	10	2.713		1,2,4-Trichlorobenzene	ND	5	0.780	
Toluene	ND	5	1.059		Hexachlorobutadiene	ND	5	1.040	
2-Hexanone	ND	10	2.873		1,2,3-Trichlorobenzene	ND	5	1.105	
					Naphthalene	ND	5	1.095	

Surrogate % Recovery

Dibromofluoromethane	127
1,2-Dichloroethane-D4	131
Toluene-D8	105
Bromofluorobenzene	94.8

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 33 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER036

Client Sample ID: MW-9
Client Project ID: 24149141 Airport
Dry Weight Basis

Date Sampled: 7/18/14
Date Received: 7/18/14
Sample Matrix: Soil

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/Kg	7/24/2014	8015C
TPH-DRO	ND	5	mg/Kg	7/24/2014	8015C
Arsenic	2.0	0.98	mg/Kg	7/29/2014	6010C
Barium	58.3	0.98	mg/Kg	7/29/2014	6010C
Cadmium	ND	0.49	mg/Kg	7/29/2014	6010C
Chromium	4.2	0.49	mg/Kg	7/29/2014	6010C
Lead	2.7	0.49	mg/Kg	7/29/2014	6010C
Selenium	ND	1.5	mg/Kg	7/29/2014	6010C
Silver	ND	0.68	mg/Kg	7/29/2014	6010C
Mercury	ND	0.042	mg/Kg	7/29/2014	7471
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane	78.6		8015C-GRO		
1-chlorooctadecane	103		8015C-DRO		

ND=Not detected

ChemSolutions LLC
TABLE 34
METHOD BLANK RESULTS
Project ID: TER036

Sample ID: Blank
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/16/14
Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	12	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	117
1,2-Dichloroethane-D4	131
Toluene-D8	95.4
Bromofluorobenzene	96.7

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 35
METHOD BLANK RESULTS
Project ID: TER036

Sample ID: Blank
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/17/14
Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	47	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	21	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	116
1,2-Dichloroethane-D4	123
Toluene-D8	98.6
Bromofluorobenzene	93.6

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 36
METHOD BLANK RESULTS
Project ID: TER036

Sample ID: Blank
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/24/14
Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	110
1,2-Dichloroethane-D4	120
Toluene-D8	105
Bromofluorobenzene	105

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 37
METHOD BLANK RESULTS
Project ID: TER036

Sample ID: Blank
Client Project ID: 24149141 Airport
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/21/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/21/2014	8015C
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane		107	8015C-GRO		
1-chlorooctadecane		96.8	8015C-DRO		

ND= Not detected at or above the reporting limit.

ChemSolutions LLC
TABLE 38
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER036

Sample ID: Water LCS
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/17/14
Sample Matrix: Water

Analyte	Amount Recovered	% Recovery	Analyte	Amount Recovered	% Recovery
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	49.4	98.8
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	57.9	116	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	52.6	105	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	49.7	99.4	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	43.8	87.6	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	120
1,2-Dichloroethane-D4	115
Toluene-D8	89.8
Bromofluorobenzene	83.5

ND= Not detected

ChemSolutions LLC
TABLE 39
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER036

Sample ID: Water LCS
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/24/14
Sample Matrix: Water

Analyte	Amount Recovered	% Recovery	Analyte	Amount Recovered	% Recovery
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	54.4	109
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	56.2	112	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	52.0	104	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	56.2	112	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	53.5	107	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	101
1,2-Dichloroethane-D4	101
Toluene-D8	105
Bromofluorobenzene	98.1

ND= Not detected

ChemSolutions LLC
TABLE 40
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER036

Client Project ID: 24149141 Airport

Sample Matrix: Water

EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>Date Analyzed: 7/21/14</u>
TPH-GRO	2.03	% RECOVERY
		102

Surrogate Recoveries

1-chlorooctane	48.0	96.0
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UNITS
mg/L

EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>Date Analyzed: 7/21/14</u>
TPH-DRO	5.37	% RECOVERY
		94.0

UNITS
mg/L

Surrogate Recoveries

1-chlorooctadecane	51.5	103
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mg/L

ChemSolutions LLC
 TABLE 41 (Page 1 of 2)
MATRIX SPIKE RESULTS
 Project ID: TER036

Client Sample ID: TW-7
 Client Project ID: 24149141 Airport
 EPA Method 8260C
 Units: ug/L
 Spike Amount: 50 ug/L

Date Sampled: 7/17/14
 Date Received: 7/17/14
 Date Analyzed: 7/17/14
 Sample Matrix: Water

<u>Analyte</u>	Amount Recovered	% Recovery	<u>Analyte</u>	Amount Recovered	% Recovery
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	52.4	105
Acetone	106 B	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	55.7	111	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	75 B	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	57.0	114	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	55.5	111	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	63.5	127	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	115
1,2-Dichloroethane-D4	113
Toluene-D8	101
Bromofluorobenzene	92.8

ND = Not Detected, NA = Not Analyzed
 B=Analyte detected in method blank.

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TABLE 41 (Page 2 of 2)
MATRIX SPIKE DUPLICATE RESULTS
Project ID: TER036

Client Sample ID: TW-7
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: 7/17/14
Date Received: 7/17/14
Date Analyzed: 7/17/14
Sample Matrix: Water

Analyte	Amount Recovered	% Recovery	RPD	Analyte	Amount Recovered	% Recovery	RPD
Dichlorodifluoromethane	ND	NA	NA	trans-1,3-Dichloropropene	ND	NA	NA
Chloromethane	ND	NA	NA	1,1,2-Trichloroethane	ND	NA	NA
Vinyl Chloride	ND	NA	NA	Tetrachloroethene	ND	NA	NA
Bromomethane	ND	NA	NA	Dibromochloromethane	ND	NA	NA
Chloroethane	ND	NA	NA	1,2-Dibromoethane	ND	NA	NA
Trichlorofluoromethane	ND	NA	NA	Chlorobenzene	51.7	103	1.3
Acetone	105 B	NA	NA	1,1,1,2-Tetrachloroethane	ND	NA	NA
1,1-Dichloroethene	55.8	112	0.2	Ethylbenzene	ND	NA	NA
Carbon Disulfide	ND	NA	NA	Total Xylene	ND	NA	NA
Methyl-tert-butyl ether	ND	NA	NA	Styrene	ND	NA	NA
Methylene Chloride	70 B	NA	NA	Isopropylbenzene	ND	NA	NA
trans-1,2-Dichloroethene	ND	NA	NA	Bromoform	ND	NA	NA
1,1-Dichloroethane	ND	NA	NA	n-Propylbenzene	ND	NA	NA
Vinyl acetate	ND	NA	NA	1,2,3-Trichloropropane	ND	NA	NA
2-Butanone	ND	NA	NA	2-Chlorotoluene	ND	NA	NA
cis-1,2-Dichloroethene	ND	NA	NA	1,3,5-Trimethylbenzene	ND	NA	NA
Chloroform	ND	NA	NA	4-Chlorotoluene	ND	NA	NA
Tetrahydrofuran	ND	NA	NA	t-Butylbenzene	ND	NA	NA
1,1,1-Trichloroethane	ND	NA	NA	1,2,4-Trimethylbenzene	ND	NA	NA
Carbon Tetrachloride	ND	NA	NA	sec-Butylbenzene	ND	NA	NA
Benzene	56.5	113	0.9	p-Isopropyltoluene	ND	NA	NA
1,2-Dichloroethane	ND	NA	NA	1,1,2,2-Tetrachloroethane	ND	NA	NA
Trichloroethene	54.6	109	1.6	1,3-Dichlorobenzene	ND	NA	NA
1,2-Dichloropropane	ND	NA	NA	1,4-Dichlorobenzene	ND	NA	NA
Dibromomethane	ND	NA	NA	n-Butylbenzene	ND	NA	NA
Bromodichloromethane	ND	NA	NA	1,2 Dichlorobenzene	ND	NA	NA
cis-1,3-Dichloropropene	ND	NA	NA	1,2-Dibromo-3-chloropropane	ND	NA	NA
4-Methyl-2-pentanone	ND	NA	NA	1,2,4-Trichlorobenzene	ND	NA	NA
Toluene	61.1	122	3.9	Hexachlorobutadiene	ND	NA	NA
2-Hexanone	ND	NA	NA	1,2,3-Trichlorobenzene	ND	NA	NA
				Naphthalene	ND	NA	NA

Surrogate	% Recovery
Dibromofluoromethane	113
1,2-Dichloroethane-D4	112
Toluene-D8	102
Bromofluorobenzene	92.0

ND = Not Detected, NA = Not Analyzed
B=Analyte detected in method blank.

ChemSolutions LLC
TABLE 42 (Page 1 of 2)
MATRIX SPIKE RESULTS
Project ID: TER036

Client Sample ID: TW-6
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: 7/16/14
Date Received: 7/17/14
Date Analyzed: 7/24/14
Sample Matrix: Water

<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>	<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	54.4	109
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	61.6	123	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	58.7	117	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	58.8	118	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	58.6	117	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	107
1,2-Dichloroethane-D4	117
Toluene-D8	106
Bromofluorobenzene	102

ND = Not Detected, NA = Not Analyzed

ChemSolutions LLC
TABLE 42 (Page 2 of 2)
MATRIX SPIKE DUPLICATE RESULTS
Project ID: TER036

Client Sample ID: TW-6
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: 7/16/14
Date Received: 7/17/14
Date Analyzed: 7/24/14
Sample Matrix: Water

Analyte	Amount Recovered	% Recovery	RPD	Analyte	Amount Recovered	% Recovery	RPD
Dichlorodifluoromethane	ND	NA	NA	trans-1,3-Dichloropropene	ND	NA	NA
Chloromethane	ND	NA	NA	1,1,2-Trichloroethane	ND	NA	NA
Vinyl Chloride	ND	NA	NA	Tetrachloroethene	ND	NA	NA
Bromomethane	ND	NA	NA	Dibromochloromethane	ND	NA	NA
Chloroethane	ND	NA	NA	1,2-Dibromoethane	ND	NA	NA
Trichlorofluoromethane	ND	NA	NA	Chlorobenzene	54.0	108	0.7
Acetone	ND	NA	NA	1,1,1,2-Tetrachloroethane	ND	NA	NA
1,1-Dichloroethene	59.7	119	3.1	Ethylbenzene	ND	NA	NA
Carbon Disulfide	ND	NA	NA	Total Xylene	ND	NA	NA
Methyl-tert-butyl ether	ND	NA	NA	Styrene	ND	NA	NA
Methylene Chloride	ND	NA	NA	Isopropylbenzene	ND	NA	NA
trans-1,2-Dichloroethene	ND	NA	NA	Bromoform	ND	NA	NA
1,1-Dichloroethane	ND	NA	NA	n-Propylbenzene	ND	NA	NA
Vinyl acetate	ND	NA	NA	1,2,3-Trichloropropane	ND	NA	NA
2-Butanone	ND	NA	NA	2-Chlorotoluene	ND	NA	NA
cis-1,2-Dichloroethene	ND	NA	NA	1,3,5-Trimethylbenzene	ND	NA	NA
Chloroform	ND	NA	NA	4-Chlorotoluene	ND	NA	NA
Tetrahydrofuran	ND	NA	NA	t-Butylbenzene	ND	NA	NA
1,1,1-Trichloroethane	ND	NA	NA	1,2,4-Trimethylbenzene	ND	NA	NA
Carbon Tetrachloride	ND	NA	NA	sec-Butylbenzene	ND	NA	NA
Benzene	56.5	113	3.8	p-Isopropyltoluene	ND	NA	NA
1,2-Dichloroethane	ND	NA	NA	1,1,2,2-Tetrachloroethane	ND	NA	NA
Trichloroethene	55.5	111	5.8	1,3-Dichlorobenzene	ND	NA	NA
1,2-Dichloropropane	ND	NA	NA	1,4-Dichlorobenzene	ND	NA	NA
Dibromomethane	ND	NA	NA	n-Butylbenzene	ND	NA	NA
Bromodichloromethane	ND	NA	NA	1,2 Dichlorobenzene	ND	NA	NA
cis-1,3-Dichloropropene	ND	NA	NA	1,2-Dibromo-3-chloropropane	ND	NA	NA
4-Methyl-2-pentanone	ND	NA	NA	1,2,4-Trichlorobenzene	ND	NA	NA
Toluene	57.2	114	2.4	Hexachlorobutadiene	ND	NA	NA
2-Hexanone	ND	NA	NA	1,2,3-Trichlorobenzene	ND	NA	NA
				Naphthalene	ND	NA	NA

Surrogate	% Recovery
Dibromofluoromethane	108
1,2-Dichloroethane-D4	108
Toluene-D8	108
Bromofluorobenzene	109

ND = Not Detected, NA = Not Analyzed

ChemSolutions LLC
TABLE 43
MATRIX SPIKE RESULTS
Project ID: TER036

Client Project ID: 24149141 Airport
Sample Matrix: Water

EPA Method 8015C		MW-1		MW-1		Date Sampled: 7/14/14
<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>		<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	Date Received: 7/15/14
TPH-GRO	2.14	107		2.08	104	
Surrogate Recoveries						
1-chlorooctane	49.7	99.4		48.8	97.6	NA ug/L
EPA Method 8015C		MW-1		MW-1		Date Analyzed: 7/21/14
<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>		<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	<u>%RSD</u> <u>UNITS</u>
TPH-DRO	3.63	63.6		4.15	72.7	2.84 mg/L
Surrogate Recoveries						
1-chlorooctadecane	26.2	52.4		25.8	51.6	NA ug/Kg

ChemSolutions LLC
TABLE 44
METHOD BLANK RESULTS
Project ID: TER036

Sample ID: Blank
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: mg/Kg, Dry Weight Basis

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/20/14
Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting		<u>Concentration</u>	<u>Limit</u>	Reporting	
		<u>Limit</u>	<u>Analyte</u>			<u>Limit</u>	
Dichlorodifluoromethane	ND	5	trans-1,3-Dichloropropene	ND	5		
Chloromethane	ND	5	1,1,2-Trichloroethane	ND	2		
Vinyl Chloride	ND	2	Tetrachloroethene	ND	2		
Bromomethane	ND	5	Dibromochloromethane	ND	5		
Chloroethane	ND	5	1,2-Dibromoethane	ND	5		
Trichlorofluoromethane	ND	5	Chlorobenzene	ND	2		
Acetone	ND	20	1,1,1,2-Tetrachloroethane	ND	5		
1,1-Dichloroethene	ND	5	Ethylbenzene	ND	5		
Carbon Disulfide	ND	5	Total Xylene	ND	5		
Methyl-tert-butyl ether	ND	2	Styrene	ND	5		
Methylene Chloride	44	5	Isopropylbenzene	ND	5		
trans-1,2-Dichloroethene	ND	2	Bromoform	ND	5		
1,1-Dichloroethane	ND	2	n-Propylbenzene	ND	5		
Vinyl acetate	ND	10	1,2,3-Trichloropropane	ND	5		
2-Butanone	ND	10	2-Chlorotoluene	ND	5		
cis-1,2-Dichloroethene	ND	2	1,3,5-Trimethylbenzene	ND	5		
Chloroform	ND	5	4-Chlorotoluene	ND	5		
Tetrahydrofuran	ND	10	t-Butylbenzene	ND	5		
1,1,1-Trichloroethane	ND	2	1,2,4-Trimethylbenzene	ND	5		
Carbon Tetrachloride	ND	2	sec-Butylbenzene	ND	5		
Benzene	ND	2	p-Isopropyltoluene	ND	5		
1,2-Dichloroethane	ND	2	1,1,2,2-Tetrachloroethane	ND	5		
Trichloroethene	ND	2	1,3-Dichlorobenzene	ND	5		
1,2-Dichloropropane	ND	5	1,4-Dichlorobenzene	ND	5		
Dibromomethane	ND	5	n-Butylbenzene	ND	5		
Bromodichloromethane	ND	5	1,2-Dichlorobenzene	ND	5		
cis-1,3-Dichloropropene	ND	5	1,2-Dibromo-3-chloropropane	ND	5		
4-Methyl-2-pentanone	ND	10	1,2,4-Trichlorobenzene	ND	5		
Toluene	ND	5	Hexachlorobutadiene	ND	5		
2-Hexanone	ND	10	1,2,3-Trichlorobenzene	ND	5		
			Naphthalene	ND	5		

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	114
1,2-Dichloroethane-D4	115
Toluene-D8	104
Bromofluorobenzene	93.5

ND= Not detected

ChemSolutions LLC
TABLE 45
METHOD BLANK RESULTS
Project ID: TER036

Sample ID: Blank
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: mg/Kg, Dry Weight Basis

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/24/14
Sample Matrix: Soil

<u>Analyte</u>	<u>Concentration</u>	Reporting		<u>Concentration</u>	<u>Limit</u>	Reporting	
		<u>Limit</u>	<u>Analyte</u>			<u>Limit</u>	
Dichlorodifluoromethane	ND	5	trans-1,3-Dichloropropene	ND	5		
Chloromethane	ND	5	1,1,2-Trichloroethane	ND	2		
Vinyl Chloride	ND	2	Tetrachloroethene	ND	2		
Bromomethane	ND	5	Dibromochloromethane	ND	5		
Chloroethane	ND	5	1,2-Dibromoethane	ND	5		
Trichlorofluoromethane	ND	5	Chlorobenzene	ND	2		
Acetone	ND	20	1,1,1,2-Tetrachloroethane	ND	5		
1,1-Dichloroethene	ND	5	Ethylbenzene	ND	5		
Carbon Disulfide	ND	5	Total Xylene	ND	5		
Methyl-tert-butyl ether	ND	2	Styrene	ND	5		
Methylene Chloride	ND	5	Isopropylbenzene	ND	5		
trans-1,2-Dichloroethene	ND	2	Bromoform	ND	5		
1,1-Dichloroethane	ND	2	n-Propylbenzene	ND	5		
Vinyl acetate	ND	10	1,2,3-Trichloropropane	ND	5		
2-Butanone	ND	10	2-Chlorotoluene	ND	5		
cis-1,2-Dichloroethene	ND	2	1,3,5-Trimethylbenzene	ND	5		
Chloroform	ND	5	4-Chlorotoluene	ND	5		
Tetrahydrofuran	ND	10	t-Butylbenzene	ND	5		
1,1,1-Trichloroethane	ND	2	1,2,4-Trimethylbenzene	ND	5		
Carbon Tetrachloride	ND	2	sec-Butylbenzene	ND	5		
Benzene	ND	2	p-Isopropyltoluene	ND	5		
1,2-Dichloroethane	ND	2	1,1,2,2-Tetrachloroethane	ND	5		
Trichloroethene	ND	2	1,3-Dichlorobenzene	ND	5		
1,2-Dichloropropane	ND	5	1,4-Dichlorobenzene	ND	5		
Dibromomethane	ND	5	n-Butylbenzene	ND	5		
Bromodichloromethane	ND	5	1,2-Dichlorobenzene	ND	5		
cis-1,3-Dichloropropene	ND	5	1,2-Dibromo-3-chloropropane	ND	5		
4-Methyl-2-pentanone	ND	10	1,2,4-Trichlorobenzene	ND	5		
Toluene	ND	5	Hexachlorobutadiene	ND	5		
2-Hexanone	ND	10	1,2,3-Trichlorobenzene	ND	5		
			Naphthalene	ND	5		

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	112
1,2-Dichloroethane-D4	116
Toluene-D8	104
Bromofluorobenzene	100

ND= Not detected

8/13/14

ChemSolutions LLC
TABLE 46
METHOD BLANK RESULTS
Project ID: TER036

Sample ID: Blank
Client Project ID: 24149141 Airport
Dry Weight Basis

Date Sampled: NA
Date Received: NA
Sample Matrix: Soil

<u>ANALYTE</u>	<u>Concentration</u>	Reporting <u>Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	EPA <u>Method</u>
TPH-GRO	ND	0.5	mg/Kg	7/23/2014	8015C
TPH-DRO	ND	5	mg/Kg	7/24/2014	8015C
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane		102	8015C-GRO		
1-chlorooctadecane		101	8015C-DRO		

<u>ANALYTE</u>	<u>Concentration</u>	Reporting <u>Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	EPA <u>Method</u>
TPH-GRO	ND	0.5	mg/Kg	7/24/2014	8015C
<u>Surrogate Recoveries</u>		<u>% Recovery</u>	<u>Method</u>		
1-chlorooctane		99.1	8015C-GRO		

ND=Not detected

ChemSolutions LLC
TABLE 47
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER036

Sample ID: Laboratory Control Sample
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: mg/Kg
Spike Amount: 50 ug/Kg

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/20/14
Sample Matrix: Soil

<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>	<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	52.6	105
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	54.0	108	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methylene Chloride	18 B	NA	Styrene	ND	NA
Methyl-t-butyl ether	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	62.7	125	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	50.6	101	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	57.4	115	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	125
1,2-Dichloroethane-D4	127
Toluene-D8	103
Bromofluorobenzene	95.6

ND= Not detected

B=Analyte detected in method blank.

ChemSolutions LLC
TABLE 48
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER036

Sample ID: Laboratory Control Sample
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: mg/Kg
Spike Amount: 50 ug/Kg

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/25/14
Sample Matrix: Soil

<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>	<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	45.5	91.0
Acetone	ND	NA	1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	53.8	108	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methylene Chloride	ND	NA	Styrene	ND	NA
Methyl-t-butyl ether	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	55.4	111	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	43.1	86.2	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	47.3	94.6	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	128
1,2-Dichloroethane-D4	133
Toluene-D8	104
Bromofluorobenzene	98.0

ND= Not detected

ChemSolutions LLC
TABLE 49
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER036

Client Project ID: 24149141 Airport

Sample Matrix: Soil

EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
TPH-GRO	2.07	104	mg/Kg

Surrogate Recoveries

1-chlorooctane	48.0
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Date Analyzed: 7/23/14

<u>% RECOVERY</u>	96.0
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<u>UNITS</u>	ug/Kg
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EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
TPH-DRO	100	100	mg/Kg

Surrogate Recoveries

1-chlorooctadecane	47.3
--------------------	------

Date Analyzed: 7/24/14

<u>% RECOVERY</u>	94.6
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<u>UNITS</u>	ug/Kg
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ChemSolutions LLC
 TABLE 50 (Page 1 of 2)
MATRIX SPIKE RESULTS
 Project ID: TER036

Client Sample ID: TW-5
 Client Project ID: 24149141 Airport
 EPA Method 8260C
 Units: mg/Kg
 Spike Amount: 50 ug/Kg

Date Sampled: 7/16/14
 Date Received: 7/17/14
 Date Analyzed: 7/20/14
 Sample Matrix: Soil

<u>Analyte</u>	Amount Recovered	% Recovery	<u>Analyte</u>	Amount Recovered	% Recovery
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	52.2	104
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	56.2	112	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methylene Chloride	35 B	NA	Styrene	ND	NA
Methyl-t-butyl ether	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	62.8	126	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	52.1	104	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	62.8	126	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	126
1,2-Dichloroethane-D4	132
Toluene-D8	104
Bromofluorobenzene	93.5

ND = Not Detected, NA = Not Analyzed or Not Applicable
 B=Analyte detected in method blank.

ChemSolutions LLC
TABLE 50 (Page 2 of 2)
MATRIX SPIKE DUPLICATE RESULTS
Project ID: TER036

Client Sample ID: TW-5
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: mg/Kg
Spike Amount: 50 ug/Kg

Date Sampled: 7/16/14
Date Received: 7/17/14
Date Analyzed: 7/20/14
Sample Matrix: Soil

Analyte	Amount Recovered	% Recovery	RPD	Analyte	Amount Recovered	% Recovery	RPD
Dichlorodifluoromethane	ND	NA	NA	trans-1,3-Dichloropropene	ND	NA	NA
Chloromethane	ND	NA	NA	1,1,2-Trichloroethane	ND	NA	NA
Vinyl Chloride	ND	NA	NA	Tetrachloroethene	ND	NA	NA
Bromomethane	ND	NA	NA	Dibromochloromethane	ND	NA	NA
Chloroethane	ND	NA	NA	1,2-Dibromoethane	ND	NA	NA
Trichlorofluoromethane	ND	NA	NA	Chlorobenzene	54.5	109	4.3
Acetone	ND	NA	NA	1,1,1,2-Tetrachloroethane	ND	NA	NA
1,1-Dichloroethene	55.4	111	1.4	Ethylbenzene	ND	NA	NA
Carbon Disulfide	ND	NA	NA	Total Xylene	ND	NA	NA
Methylene Chloride	37 B	NA	NA	Styrene	ND	NA	NA
Methyl-t-butyl ether	ND	NA	NA	Isopropylbenzene	ND	NA	NA
trans-1,2-Dichloroethene	ND	NA	NA	Bromoform	ND	NA	NA
1,1-Dichloroethane	ND	NA	NA	n-Propylbenzene	ND	NA	NA
Vinyl acetate	ND	NA	NA	1,2,3-Trichloropropane	ND	NA	NA
2-Butanone	ND	NA	NA	2-Chlorotoluene	ND	NA	NA
cis-1,2-Dichloroethene	ND	NA	NA	1,3,5-Trimethylbenzene	ND	NA	NA
Chloroform	ND	NA	NA	4-Chlorotoluene	ND	NA	NA
Tetrahydrofuran	ND	NA	NA	t-Butylbenzene	ND	NA	NA
1,1,1-Trichloroethane	ND	NA	NA	1,2,4-Trimethylbenzene	ND	NA	NA
Carbon Tetrachloride	ND	NA	NA	sec-Butylbenzene	ND	NA	NA
Benzene	64.2	128	2.2	p-Isopropyltoluene	ND	NA	NA
1,2-Dichloroethane	ND	NA	NA	1,1,2,2-Tetrachloroethane	ND	NA	NA
Trichloroethene	52.8	106	1.3	1,3-Dichlorobenzene	ND	NA	NA
1,2-Dichloropropane	ND	NA	NA	1,4-Dichlorobenzene	ND	NA	NA
Dibromomethane	ND	NA	NA	n-Butylbenzene	ND	NA	NA
Bromodichloromethane	ND	NA	NA	1,2 Dichlorobenzene	ND	NA	NA
cis-1,3-Dichloropropene	ND	NA	NA	1,2-Dibromo-3-chloropropane	ND	NA	NA
4-Methyl-2-pentanone	ND	NA	NA	1,2,4-Trichlorobenzene	ND	NA	NA
Toluene	62.6	125	0.3	Hexachlorobutadiene	ND	NA	NA
2-Hexanone	ND	NA	NA	1,2,3-Trichlorobenzene	ND	NA	NA
				Naphthalene	ND	NA	NA

Surrogate	% Recovery
Dibromofluoromethane	127
1,2-Dichloroethane-D4	131
Toluene-D8	104
Bromofluorobenzene	94.0

ND = Not Detected, NA = Not Analyzed or Not Applicable
B=Analyte detected in method blank.

ChemSolutions LLC
 TABLE 51 (Page 1 of 2)
MATRIX SPIKE RESULTS
 Project ID: TER036

Client Sample ID: TW-5
 Client Project ID: 24149141 Airport
 EPA Method 8260C
 Units: mg/Kg
 Spike Amount: 50 ug/Kg

Date Sampled: 7/16/14
 Date Received: 7/17/14
 Date Analyzed: 7/25/14
 Sample Matrix: Soil

<u>Analyte</u>	Amount Recovered	% Recovery	<u>Analyte</u>	Amount Recovered	% Recovery
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	50.4	101
Acetone	ND	NA	1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	56.1	112	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methylene Chloride	ND	NA	Styrene	ND	NA
Methyl-t-butyl ether	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	60.1	120	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	45.4	90.8	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	50.2	100	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	125
1,2-Dichloroethane-D4	128
Toluene-D8	101
Bromofluorobenzene	97.7

ND = Not Detected, NA = Not Analyzed or Not Applicable

ChemSolutions LLC
TABLE 51 (Page 2 of 2)
MATRIX SPIKE DUPLICATE RESULTS
Project ID: TER036

Client Sample ID: TW-5
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: mg/Kg
Spike Amount: 50 ug/Kg

Date Sampled: 7/16/14
Date Received: 7/17/14
Date Analyzed: 7/25/14
Sample Matrix: Soil

Analyte	Amount Recovered	% Recovery	RPD	Analyte	Amount Recovered	% Recovery	RPD
Dichlorodifluoromethane	ND	NA	NA	trans-1,3-Dichloropropene	ND	NA	NA
Chloromethane	ND	NA	NA	1,1,2-Trichloroethane	ND	NA	NA
Vinyl Chloride	ND	NA	NA	Tetrachloroethene	ND	NA	NA
Bromomethane	ND	NA	NA	Dibromochloromethane	ND	NA	NA
Chloroethane	ND	NA	NA	1,2-Dibromoethane	ND	NA	NA
Trichlorofluoromethane	ND	NA	NA	Chlorobenzene	48.9	97.8	3.0
Acetone	ND	NA	NA	1,1,1,2-Tetrachloroethane	ND	NA	NA
1,1-Dichloroethene	56.2	112	0.2	Ethylbenzene	ND	NA	NA
Carbon Disulfide	ND	NA	NA	Total Xylene	ND	NA	NA
Methylene Chloride	ND	NA	NA	Styrene	ND	NA	NA
Methyl-t-butyl ether	ND	NA	NA	Isopropylbenzene	ND	NA	NA
trans-1,2-Dichloroethene	ND	NA	NA	Bromoform	ND	NA	NA
1,1-Dichloroethane	ND	NA	NA	n-Propylbenzene	ND	NA	NA
Vinyl acetate	ND	NA	NA	1,2,3-Trichloropropane	ND	NA	NA
2-Butanone	ND	NA	NA	2-Chlorotoluene	ND	NA	NA
cis-1,2-Dichloroethene	ND	NA	NA	1,3,5-Trimethylbenzene	ND	NA	NA
Chloroform	ND	NA	NA	4-Chlorotoluene	ND	NA	NA
Tetrahydrofuran	ND	NA	NA	t-Butylbenzene	ND	NA	NA
1,1,1-Trichloroethane	ND	NA	NA	1,2,4-Trimethylbenzene	ND	NA	NA
Carbon Tetrachloride	ND	NA	NA	sec-Butylbenzene	ND	NA	NA
Benzene	57.6	115	4.2	p-Isopropyltoluene	ND	NA	NA
1,2-Dichloroethane	ND	NA	NA	1,1,2,2-Tetrachloroethane	ND	NA	NA
Trichloroethene	45.1	90.2	0.7	1,3-Dichlorobenzene	ND	NA	NA
1,2-Dichloropropane	ND	NA	NA	1,4-Dichlorobenzene	ND	NA	NA
Dibromomethane	ND	NA	NA	n-Butylbenzene	ND	NA	NA
Bromodichloromethane	ND	NA	NA	1,2 Dichlorobenzene	ND	NA	NA
cis-1,3-Dichloropropene	ND	NA	NA	1,2-Dibromo-3-chloropropane	ND	NA	NA
4-Methyl-2-pentanone	ND	NA	NA	1,2,4-Trichlorobenzene	ND	NA	NA
Toluene	49.8	99.6	0.8	Hexachlorobutadiene	ND	NA	NA
2-Hexanone	ND	NA	NA	1,2,3-Trichlorobenzene	ND	NA	NA
				Naphthalene	ND	NA	NA

Surrogate	% Recovery
Dibromofluoromethane	127
1,2-Dichloroethane-D4	130
Toluene-D8	101
Bromofluorobenzene	96.0

ND = Not Detected, NA = Not Analyzed or Not Applicable

ChemSolutions LLC
TABLE 52
MATRIX SPIKE RESULTS
Project ID: TER036

Client Project ID: 24149141 Airport
Sample Matrix: Soil

Date Sampled: NA
Date Received: NA

EPA Method 8015C

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	<u>%RSD</u>	<u>UNITS</u>
TPH-GRO	1.91	95.5	2.04	102	6.58	mg/Kg

Surrogate Recoveries

1-chlorooctane	41.9	83.8	45.2	90.4	NA	ug/Kg
----------------	------	------	------	------	----	-------

EPA Method 8015C

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	<u>%RSD</u>	<u>UNITS</u>
TPH-DRO	98.4	98.4	102	102	3.59	mg/Kg

Surrogate Recoveries

1-chlorooctadecane	46.8	93.6	48.3	96.6	NA	ug/Kg
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End of Report

Page 1 of 6 7/18/14

Chain of Custody



7388 S. Revere Pkwy, #806

Centennial, CO 80112

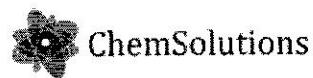
Phone: 303-771-5570

Fax: 303-771-5574

Email: john@chemmobile.com

Client Name & Address: Terracon		Client Project Name & Location: Airport				ChemSolutions Project #: TERO36			
Contact: Clay		Sampler:				Location Received: on-site			
Phone #:		Client Project Number:				Custody Seals: n/a			
E-mail:		Invoice to:				Temperature Upon Receipt: Chilled			
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative	Remarks		
MW-1	7/14/14	1626	G	Water	7	PCB & Metals VOC - 5260 GRO/DRC			
Relinquished by:		Date:	Time:	Received by:			Date:	Time:	
				John Lovell			7/15/14	0745	
Relinquished by:		Date:	Time:	Received by:			Date:	Time:	

Chain of Custody



ChemSolutions

7388 S. Revere Pkwy, #806

Phone: 303-771-5570

Centennial, CO 80112

Fax: 303-771-5574

Email: john@chemmobile.com

Client Name & Address: Terracom		Client Project Name & Location: Airport				ChemSolutions Project #: TEKO 34					
Contact: Clay Muirhead		Sampler:				Location Received: ON SITE					
Phone #:		Client Project Number:				Custody Seals: NAME					
E-mail:		Invoice to:				Temperature Upon Receipt: ON SITE					
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative				Remarks	
						VOC					
TW-4	7/17/14	0701	G	GW	2	X					
TW-3	7/17/14	0724	G	GW	2	X					
MULS TW-5	7/17/14	0747	G	GW	2	X					Change per Craig N 7/17/14
TW-6	7/17/14	0806	G	GW	3	X					
TW-7	7/17/14	0824	G	GW	2	X					
TW-1	7/17/14	0855	G	O-W	2	X					
TW-1	7/18/14			S	1	X					
TW-2	7/18/14			S	1	X					
TW-3	7/18/14			S	1	X					
TW-4	7/18/14			S	1	X					
Relinquished by:		Date:	Time:	Received by:				Date:	Time:		
				Heather Raney				7/17/14	820		
Relinquished by:		Date:	Time:	Received by:				Date:	Time:		

Chain of Custody



ChemSolutions

7388 S. Revere Pkwy, #806

Phone: 303-771-5570

Centennial, CO 80112

Fax: 303-771-5574

Email: john@chemmobile.com

Client Name & Address: Terracon		Client Project Name & Location: Airport				ChemSolutions Project #: TEK036				
Contact: Playfulwind		Sampler:				Location Received: on site				
Phone #:		Client Project Number:				Custody Seals: none				
E-mail:		Invoice to:				Temperature Upon Receipt: MRC				
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative				Remarks
						VOCs				
TW-5	7/16/14		S	1	X					
TW-4	7/16/14		S	1	X					
TW-7	7/16/14		S	1	X					
VP-1	7/16/14		S	1	X					
Relinquished by:		Date:	Time:	Received by:				Date:	Time:	
				Heather Raney				7/17/14	020	
Relinquished by:		Date:	Time:	Received by:				Date:	Time:	

Chain of Custody



ChemSolutions

7388 S. Revere Pkwy, #806

Phone: 303-771-5570

Centennial, CO 80122

Fax: 303-771-5574

Email: john@chemmobile.com

Client Name & Address: Terracon		Client Project Name & Location: Airport				ChemSolutions Project #: TERO 36					
Contact:		Sampler:				Location Received: on-site					
Phone #:		Client Project Number:				Custody Seals: n/a					
E-mail:		Invoice to:				Temperature Upon Receipt: 4°C					
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative				Remarks	
						VOC	GRG	DOP			
TW-8	7/17/14	1015		W	2	X					
TW-9	7/17/14	1030		W	2	X					
MW-4	7/17/14	1405		W	2	X	✓	✓			
TW-8	7/17/14			S	1	X					
Relinquished by:		Date:	Time:	Received by:				Date:	Time:		
				James Graves				7/17/14	1430		
Relinquished by:		Date:	Time:	Received by:				Date:	Time:		

Chain of Custody



ChemSolutions

7388 S. Revere Pkwy, #806

Phone: 303-771-5570

Centennial, CO 80112

Fax: 303-771-5574

Email: john@chemmobile.com

Client Name & Address: <i>Terracon</i>		Client Project Name & Location: <i>Airport</i>				ChemSolutions Project #: TEKO36					
Contact:					Location Received: <i>Terracon Ft. Collins</i>						
Phone #:	Sampler:				Custody Seals: <i>n/a</i>						
E-mail:	Client Project Number:				Temperature Upon Receipt: <i>4°C</i>						
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative				Remarks	
						VOC	Grav	O ₂	SO ₂		
TW-2	7/17/14	1501		W	2	X					
TW-10	7/17/14	1652		W	2	X					
MW-5	7/17/14	1715		WF	2	X					
TW-10	7/17/14	1160		S	1	X					
MW-4	7/17/14	1200		S	1	X	X	X	X		
TW-9	7/17/14	1330		S	1	X					
MW-5	7/17/14	1500		S	1	X	X	X	X		
MW-6	7/17/14	1630		S	1	X	X	X	X		
Relinquished by:		Date:	Time:	Received by: <i>James Graves</i>				Date:	Time:		
								<i>7/17/14</i>	<i>1900</i>		
Relinquished by:		Date:	Time:	Received by:				Date:	Time:		

Chain of Custody



ChemSolutions

7388 S. Revere Pkwy, #806

Phone: 303-771-5570

Centennial, CO 80112

Fax: 303-771-5574

Email: john@chemmobile.com

Client Name & Address: Terracon		Client Project Name & Location: Airport				ChemSolutions Project #: TE12036 Location Received: Terracon Ft. Collins Custody Seals: ny							
Contact:	Sampler:				Temperature Upon Receipt: on ice								
Phone #:	Client Project Number:												
E-mail:	Invoice to:												
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative						Remarks	
						VOCs	GEO	DICOs	Methyl Benzene	PCBs	PCPs		
MW-2	7/18/14	1250		S	3	X							
MW-7	7/18/14	730		S	1	X	X	X	X				
VP-2	7/18/14	800		S	1	X							
MW-9	7/18/14	830		S	1	X	X	X	X				
VP-3	7/18/14	0900		S	1	X							
MW-9	7/18/14	1400		S	1	X	X	X	X				
Relinquished by:		Date:	Time:	Received by:						Date:	Time:		
				James Graves						7/18/14	1700		
Relinquished by:		Date:	Time:	Received by:						Date:	Time:		



ChemSolutions

7388 S. Revere Parkway #806
Centennial, CO 80112
303.771.5570

August 8, 2014

Clay Muirhead
Terracon
1505 Old Happy Jack Road
Cheyenne, WY 82001

RE: TER037

Dear Clay,

Enclosed please find the analytical results for the Project #24149141 Airport water samples collected on 7/23/14.

Tables 1-7 contain the analytical results for the samples. The quality control samples are summarized in Tables 8-10.

Thank you for the opportunity to work on this project. Please call if you have any questions. The invoice will be sent separately.

Sincerely,

John Graves
Laboratory Director
ChemSolutions LLC

ChemSolutions LLC
TABLE 1 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER037

Client Sample ID: MW-7

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/23/14

Date Received: 7/24/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	1.1 J2	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	123
1,2-Dichloroethane-D4	130
Toluene-D8	102
Bromofluorobenzene	97.7

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

J2= The compound was detected and verified by its' mass spectrum at a concentration between the RL and the MDL.

ChemSolutions LLC
TABLE 1 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER037

Client Sample ID: MW-7
Client Project ID: 24149141 Airport

Date Sampled: 7/23/14
Date Received: 7/24/14
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Arsenic	ND	10.0	ug/L	7/29/2014	6010C
Barium	423	10.0	ug/L	7/29/2014	6010C
Cadmium	ND	1.0	ug/L	7/29/2014	6010C
Chromium	304	5.0	ug/L	7/29/2014	6010C
Iron	5330	50.0	ug/L	7/29/2014	6010C
Lead	9.9	5.0	ug/L	7/29/2014	6010C
Selenium	ND	15.0	ug/L	7/29/2014	6010C
Silver	ND	7.0	ug/L	7/29/2014	6010C
Mercury	ND	0.20	ug/L	7/28/2014	7470
Iron, Dissolved	ND	50.0	ug/L	7/29/2014	6010C
Nitrate	2.82	0.02	mg/L	7/24/2014	300.0
Nitrite	ND	0.01	mg/L	7/24/2014	300.0
Sulfate	35.2	0.01	mg/L	7/24/2014	300.0
Sulfite	ND H	2.0	mg/L	7/26/2014	SM 4500-SO3B
Total Organic Carbon	1.2	1.0	mg/L	7/30/2014	SM 5310C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	99.9		8015C-GRO		
1-chlorooctadecane	73.8		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 2 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER037

Client Sample ID: MW-9

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/23/14

Date Received: 7/24/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	4.5	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	119
1,2-Dichloroethane-D4	128
Toluene-D8	103
Bromofluorobenzene	98.0

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 2 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER037

Client Sample ID: MW-9
Client Project ID: 24149141 Airport

Date Sampled: 7/23/14
Date Received: 7/24/14
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Arsenic	ND	10.0	ug/L	7/29/2014	6010C
Barium	482	10.0	ug/L	7/29/2014	6010C
Cadmium	ND	1.0	ug/L	7/29/2014	6010C
Chromium	13.2	5.0	ug/L	7/29/2014	6010C
Iron	11000	50.0	ug/L	7/29/2014	6010C
Lead	17.2	5.0	ug/L	7/29/2014	6010C
Selenium	ND	15.0	ug/L	7/29/2014	6010C
Silver	ND	7.0	ug/L	7/29/2014	6010C
Mercury	ND	0.20	ug/L	7/28/2014	7470
Iron, Dissolved	ND	50.0	ug/L	7/29/2014	6010C
Nitrate	2.67	0.02	mg/L	7/24/2014	300.0
Nitrite	ND	0.01	mg/L	7/24/2014	300.0
Sulfate	23.5	0.01	mg/L	7/24/2014	300.0
Sulfite	ND H	2.0	mg/L	7/26/2014	SM 4500-SO3B
Total Organic Carbon	ND	1.0	mg/L	7/30/2014	SM 5310C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	97.5		8015C-GRO		
1-chlorooctadecane	77.8		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 3
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER037

Client Sample ID: Equip Blank-1

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/23/14

Date Received: 7/24/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	119
1,2-Dichloroethane-D4	126
Toluene-D8	103
Bromofluorobenzene	96.2

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 4
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER037

Client Sample ID: FB-1

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/23/14

Date Received: 7/24/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	119
1,2-Dichloroethane-D4	127
Toluene-D8	103
Bromofluorobenzene	97.2

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

J2=The compound was detected and verified by its' mass spectrum at a concentration between the RL and the MDL.

ChemSolutions LLC
TABLE 5 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER037

Client Sample ID: MW-8

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/23/14

Date Received: 7/24/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	120
1,2-Dichloroethane-D4	129
Toluene-D8	104
Bromofluorobenzene	97.1

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 5 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER037

Client Sample ID: MW-8
Client Project ID: 24149141 Airport

Date Sampled: 7/23/14
Date Received: 7/24/14
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Arsenic	ND	10.0	ug/L	7/29/2014	6010C
Barium	453	10.0	ug/L	7/29/2014	6010C
Cadmium	ND	1.0	ug/L	7/29/2014	6010C
Chromium	5.7	5.0	ug/L	7/29/2014	6010C
Iron	2980	50.0	ug/L	7/29/2014	6010C
Lead	5.5	5.0	ug/L	7/29/2014	6010C
Selenium	ND	15.0	ug/L	7/29/2014	6010C
Silver	ND	7.0	ug/L	7/29/2014	6010C
Mercury	ND	0.20	ug/L	7/28/2014	7470
Iron, Dissolved	ND	50.0	ug/L	7/29/2014	6010C
Nitrate	1.93	0.02	mg/L	7/24/2014	300.0
Nitrite	ND	0.01	mg/L	7/24/2014	300.0
Sulfate	49.6	0.01	mg/L	7/24/2014	300.0
Sulfite	ND H	2.0	mg/L	7/26/2014	SM 4500-SO3B
Total Organic Carbon	2.2	1.0	mg/L	7/30/2014	SM 5310C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	91.6		8015C-GRO		
1-chlorooctadecane	91.6		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 6 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER037

Client Sample ID: DUP

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/23/14

Date Received: 7/24/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	122
1,2-Dichloroethane-D4	133
Toluene-D8	104
Bromofluorobenzene	96.9

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 6 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER037

Client Sample ID: DUP
Client Project ID: 24149141 Airport

Date Sampled: 7/23/14
Date Received: 7/24/14
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Arsenic	ND	10.0	ug/L	7/29/2014	6010C
Barium	496	10.0	ug/L	7/29/2014	6010C
Cadmium	ND	1.0	ug/L	7/29/2014	6010C
Chromium	10.5	5.0	ug/L	7/29/2014	6010C
Iron	7100	50.0	ug/L	7/29/2014	6010C
Lead	8.5	5.0	ug/L	7/29/2014	6010C
Selenium	ND	15.0	ug/L	7/29/2014	6010C
Silver	ND	7.0	ug/L	7/29/2014	6010C
Mercury	ND	0.20	ug/L	7/28/2014	7470
Iron, Dissolved	ND	50.0	ug/L	7/29/2014	6010C
Nitrate	2.00	0.02	mg/L	7/24/2014	300.0
Nitrite	ND	0.01	mg/L	7/24/2014	300.0
Sulfate	50.1	0.01	mg/L	7/24/2014	300.0
Sulfite	ND H	2.0	mg/L	7/26/2014	SM 4500-SO3B
Total Organic Carbon	2.3	1.0	mg/L	7/30/2014	SM 5310C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	97.4		8015C-GRO		
1-chlorooctadecane	83.9		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 7
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER037

Client Sample ID: Trip Blank

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: NA

Date Received: 7/24/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	112
1,2-Dichloroethane-D4	120
Toluene-D8	101
Bromofluorobenzene	97.6

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 8 (Page 1 of 2)
METHOD BLANK RESULTS
Project ID: TER037

Sample ID: Blank
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/30/14
Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453	trans-1,3-Dichloropropene	ND J1	5	0.212		
Chloromethane	ND	5	0.510	1,1,2-Trichloroethane	ND	2	0.257		
Vinyl Chloride	ND	2	0.798	Tetrachloroethene	ND	2	0.678		
Bromomethane	ND	5	0.460	Dibromochloromethane	ND	5	0.398		
Chloroethane	ND	5	0.557	1,2-Dibromoethane	ND	5	0.312		
Trichlorofluoromethane	ND	5	0.674	Chlorobenzene	ND	2	0.156		
Acetone	ND	20	0.627	1,1,1,2-Tetrachloroethane	ND	5	0.413		
1,1-Dichloroethene	ND	5	0.256	Ethylbenzene	ND	5	0.251		
Carbon Disulfide	ND	5	0.367	Total Xylene	ND	5	0.523		
Methyl-tert-butyl ether	ND	2	1.252	Styrene	ND	5	0.344		
Methylene Chloride	ND	5	0.511	Isopropylbenzene	ND	5	0.315		
trans-1,2-Dichloroethene	ND	2	0.601	Bromoform	ND	5	0.628		
1,1-Dichloroethane	ND	2	0.440	n-Propylbenzene	ND	5	0.300		
Vinyl acetate	ND	10	1.006	1,2,3-Trichloropropane	ND	5	0.501		
2-Butanone	ND	10	1.077	2-Chlorotoluene	ND	5	0.572		
cis-1,2-Dichloroethene	ND	2	0.404	1,3,5-Trimethylbenzene	ND	5	0.351		
Chloroform	ND	5	0.343	4-Chlorotoluene	ND	5	0.195		
Tetrahydrofuran	ND	10	0.910	t-Butylbenzene	ND	5	0.242		
1,1,1-Trichloroethane	ND	2	0.381	1,2,4-Trimethylbenzene	ND	5	0.263		
Carbon Tetrachloride	ND	2	0.598	sec-Butylbenzene	ND	5	0.413		
Benzene	ND	2	0.417	p-Isopropyltoluene	ND	5	0.285		
1,2-Dichloroethane	ND	2	0.341	1,1,2,2-Tetrachloroethane	ND J1	5	0.477		
Trichloroethene	ND	2	0.270	1,3-Dichlorobenzene	ND	5	0.215		
1,2-Dichloropropane	ND	5	0.295	1,4-Dichlorobenzene	ND	5	0.213		
Dibromomethane	ND	5	0.383	n-Butylbenzene	ND	5	0.305		
Bromodichloromethane	ND	5	0.199	1,2 Dichlorobenzene	ND	5	0.345		
cis-1,3-Dichloropropene	ND J1	2	0.228	1,2-Dibromo-3-chloropropane	ND	5	0.877		
4-Methyl-2-pentanone	ND	10	1.249	1,2,4-Trichlorobenzene	ND	5	0.223		
Toluene	ND	5	0.279	Hexachlorobutadiene	ND	5	0.537		
2-Hexanone	ND	10	1.413	1,2,3-Trichlorobenzene	ND	5	0.392		
				Naphthalene	ND	5	0.320		

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	108
1,2-Dichloroethane-D4	115
Toluene-D8	100
Bromofluorobenzene	101

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 8 (Page 2 of 2)
METHOD BLANK RESULTS
Project ID: TER037

Sample ID: Blank
Client Project ID: 24149141 Airport
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	132		8015C-GRO		
1-chlorooctadecane	95.6		8015C-DRO		

ND= Not detected at or above the reporting limit.

ChemSolutions LLC
TABLE 9 (Page 1 of 2)
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER037

Sample ID: Water LCS
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/30/14
Sample Matrix: Water

<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>	<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	50.0	100
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	62.4	125	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	56.9	114	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	50.8	102	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	51.0	102	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	114
1,2-Dichloroethane-D4	121
Toluene-D8	100
Bromofluorobenzene	102

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC
TABLE 9 (Page 2 of 2)
LCS Spike Results
Project ID: TER037

Client Project ID: 24149141 Airport
 Sample Matrix: Water

EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
TPH-GRO	2.11	106	mg/L

Surrogate Recoveries

1-Chlorooctane	45.5	91.0	ug/L
----------------	------	------	------

EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
TPH-DRO	5.55	97.2	mg/L

Surrogate Recoveries

1-Chlorooctadecane	50.0	100	mg/L
--------------------	------	-----	------

EPA Method RSK175

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
Methane	0.180	81.5	mg/L
Ethane	0.365	88.3	mg/L
Ethene	0.334	86.6	mg/L

LCS = Laboratory Control Sample

ChemSolutions LLC
 TABLE 10 (Page 1 of 3)
MATRIX SPIKE RESULTS
 Project ID: TER037

Client Sample ID: NA
 Client Project ID: 24149141 Airport
 EPA Method 8260C
 Units: ug/L
 Spike Amount: 50 ug/L

Date Sampled: NA
 Date Received: NA
 Date Analyzed: 7/30/14
 Sample Matrix: Water

<u>Analyte</u>	Amount Recovered	% Recovery	<u>Analyte</u>	Amount Recovered	% Recovery
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	11	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	52.6	105
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	62.4	125	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	58.9	118	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	54.9	102	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	52.3	105	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

Sample concentration Trichloroethene=3.9ug/L

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	115
1,2-Dichloroethane-D4	123
Toluene-D8	99.9
Bromofluorobenzene	102

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC
TABLE 10 (Page 2 of 3)
MATRIX SPIKE DUPLICATE RESULTS
Project ID: TER037

Client Sample ID: NA
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/30/14
Sample Matrix: Water

Analyte	Amount Recovered	% Recovery	RPD	Analyte	Amount Recovered	% Recovery	RPD
Dichlorodifluoromethane	ND	NA	NA	trans-1,3-Dichloropropene	ND	NA	NA
Chloromethane	ND	NA	NA	1,1,2-Trichloroethane	ND	NA	NA
Vinyl Chloride	ND	NA	NA	Tetrachloroethene	9.1	NA	NA
Bromomethane	ND	NA	NA	Dibromochloromethane	ND	NA	NA
Chloroethane	ND	NA	NA	1,2-Dibromoethane	ND	NA	NA
Trichlorofluoromethane	ND	NA	NA	Chlorobenzene	54.0	108	2.6
Acetone	ND	NA	NA	1,1,1,2-Tetrachloroethane	ND	NA	NA
1,1-Dichloroethene	61.5	123	1.5	Ethylbenzene	ND	NA	NA
Carbon Disulfide	ND	NA	NA	Total Xylene	ND	NA	NA
Methyl-tert-butyl ether	ND	NA	NA	Styrene	ND	NA	NA
Methylene Chloride	ND	NA	NA	Isopropylbenzene	ND	NA	NA
trans-1,2-Dichloroethene	ND	NA	NA	Bromoform	ND	NA	NA
1,1-Dichloroethane	ND	NA	NA	n-Propylbenzene	ND	NA	NA
Vinyl acetate	ND	NA	NA	1,2,3-Trichloropropane	ND	NA	NA
2-Butanone	ND	NA	NA	2-Chlorotoluene	ND	NA	NA
cis-1,2-Dichloroethene	ND	NA	NA	1,3,5-Trimethylbenzene	ND	NA	NA
Chloroform	ND	NA	NA	4-Chlorotoluene	ND	NA	NA
Tetrahydrofuran	ND	NA	NA	t-Butylbenzene	ND	NA	NA
1,1,1-Trichloroethane	ND	NA	NA	1,2,4-Trimethylbenzene	ND	NA	NA
Carbon Tetrachloride	ND	NA	NA	sec-Butylbenzene	ND	NA	NA
Benzene	59.4	119	0.8	p-Isopropyltoluene	ND	NA	NA
1,2-Dichloroethane	ND	NA	NA	1,1,2,2-Tetrachloroethane	ND	NA	NA
Trichloroethene	54.8	102	0.2	1,3-Dichlorobenzene	ND	NA	NA
1,2-Dichloropropane	ND	NA	NA	1,4-Dichlorobenzene	ND	NA	NA
Dibromomethane	ND	NA	NA	n-Butylbenzene	ND	NA	NA
Bromodichloromethane	ND	NA	NA	1,2 Dichlorobenzene	ND	NA	NA
cis-1,3-Dichloropropene	ND	NA	NA	1,2-Dibromo-3-chloropropane	ND	NA	NA
4-Methyl-2-pentanone	ND	NA	NA	1,2,4-Trichlorobenzene	ND	NA	NA
Toluene	53.8	108	2.8	Hexachlorobutadiene	ND	NA	NA
2-Hexanone	ND	NA	NA	1,2,3-Trichlorobenzene	ND	NA	NA
				Naphthalene	ND	NA	NA

Sample concentration Trichloroethene=3.9ug/L

Surrogate	% Recovery
Dibromofluoromethane	111
1,2-Dichloroethane-D4	121
Toluene-D8	99.9
Bromofluorobenzene	101

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC

Table 10 (Page 3 of 3)
 Matrix Spike Results
 Project ID: TER037

Client Project ID: 24149141 Airport

Sample Matrix: Water

Date Sampled: 7/23/14

Date Received: 7/24/14

EPA Method 8015C	MW-7		MW-7		Date Analyzed: 7/25/14	
<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	<u>%RPD</u>	<u>UNITS</u>
TPH-GRO	1.83	91.5	2.10	105	13.74	mg/L
<u>Surrogate Recoveries</u>						
1-Chlorooctane	36.6	73.2	43.3	86.6	NA	ug/L
EPA Method 8015C	MW-8		MW-8		Date Analyzed: 7/29/14	
<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	<u>%RPD</u>	<u>UNITS</u>
TPH-DRO	4.70	82.3	4.39	76.9	6.82	mg/L
<u>Surrogate Recoveries</u>						
1-Chlorooctadecane	48.5	97.0	48.7	97.4	NA	mg/L
EPA Method RSK175	MW-7		MW-7		Date Analyzed: 8/4/14	
<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	<u>%RPD</u>	<u>UNITS</u>
Methane	0.171	77.7	0.174	79.2	1.74	mg/L
Ethane	0.320	77.5	0.327	79.2	2.16	mg/L
Methane	0.299	77.7	0.298	77.4	0.34	mg/L

M=Matrix spike surrogate outside QC limits. Batch accepted based on LCS recovery.

%RPD = % Relative Percent Difference, NA = Not Applicable

End of Report

Chain of Custody



Client Name & Address:

*DEQ
Airport*

Contact:

Phone #:

E-mail:

Client Project Name & Location:

*Terraceen
1505 Happy Tank Road
Casper, WY 82601*

Sampler: *Jeff Shupman*

Client Project Number: *34148141*

Invoice to: *Clay Marthead*

7388 S. Revere Pkwy, #806

Centennial, CO 80112

Email: john@chemmobile.com

Phone: 303-771-5570

Fax: 303-771-5574

ChemSolutions Project #: *TERO 37*

Location Received: *Base Lab*

Custody Seals: *Intact*

Temperature Upon Receipt: *2°C*

Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative						Remarks
MW-7	7/23/14	0915		GW	13							
MW-7	7/23/14	1301		GW	13							
Fair Blank -1	7/23/14	1237		DI	3							
FB-1	7/23/14	1239		DI	3							
MW-8	7/23/14	1444		GW	13							
DUP	7/23/14	1450		GW	13							
Trip Blank				W	3							<i>Trip blank added per C.Marthead email 7/24/14 pg</i>
Relinquished by:	Date:	Time:	Received by:			Date:						Time:
<i>Jeff Shupman</i>	7/23/14	1515	<i>Jma Graves</i>			7/24/14						925
Relinquished by:	Date:	Time:	Received by:			Date:						Time:

FedEx 79cc 3059 6526

TALKED w/
 USA GRAVES ON 7/22
 ABOUT THIS
 Q 3:00 PM SENDING THE
 + GHR IS SENDING THE REVi CONTAINERS.
 REV'D THIS AFTERNOON
 7/22

LABORATORY ANALYSIS SUMMARY
AIRPORT ADDITION AND CHEYENNE STEAM LAUNDRY
 Revised 7/22/2014

AIRPORT ADDITION						
Analyte	Laboratory Method	Existing MWs		Temporary MWs		Soil Vapor Points
		GW	Soil	GW	Soil	
Complete List of VOCs	EPA 8260	STAT	Rush	Rush	STAT	STAT
TPH-GRO and DRO	EPA 8015	STAT			STAT	STAT
RCRA 8 Metals	EPA 6010	STAT			STAT	STAT
Fe ⁺² /Fe ⁺³	Standard Method 3500 and EPA Method 6010					STAT
SO ₄ /SO ₃	EPA Method 300 and Standard Method 4500					STAT
NO ₃ /NO ₂	EPA Method 300					STAT
Total Organic Carbon	EPA Method 9060					STAT
Methane, Ethane, Ethene	RSK 175					STAT
Select List of VOCs	TO 15 or 8260					STAT

CHEYENNE STEAM LAUNDRY						
Analyte	Laboratory Method	Existing MWs		Temporary MWs		Soil Vapor Points
		GW	Soil	GW	Soil	
Complete List of VOCs	EPA 8260	STAT	Rush	Rush	STAT	STAT
TPH-GRO and DRO	EPA 8015	STAT			STAT	STAT
Fe ⁺² /Fe ⁺³	Standard Method 3500 and EPA Method 6010					STAT
SO ₄ /SO ₃	EPA Method 300 and Standard Method 4500					STAT
NO ₃ /NO ₂	EPA Method 300					STAT
Total Organic Carbon	EPA Method 9060					STAT
Methane, Ethane, Ethene	RSK 175					STAT
Select List of VOCs	TO 15 or 8260					STAT

Notes:

1. MW = monitoring well
2. GW = groundwater
3. STAT = Standard laboratory turn-around time
4. Rush = Overnight analytical results required.
5. Select list of VOCs = only those VOC constituents above lab detection limits in collected soil and GW samples.

ADD'L)



ChemSolutions

7388 S. Revere Parkway #806
Centennial, CO 80112
303.771.5570

August 8, 2014

Clay Muirhead
Terracon
1505 Old Happy Jack Road
Cheyenne, WY 82001

RE: TER038

Dear Clay,

Enclosed please find the analytical results for the Project #24149141 Airport water samples collected on 7/24/14.

Tables 1-7 contain the analytical results for the samples. The quality control samples are summarized in Tables 8-10.

Thank you for the opportunity to work on this project. Please call if you have any questions. The invoice will be sent separately.

Sincerely,

John Graves
Laboratory Director
ChemSolutions LLC

ChemSolutions LLC
TABLE 1
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER038

Client Sample ID: Trip Blank

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: NA

Date Received: 7/25/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	118
1,2-Dichloroethane-D4	129
Toluene-D8	102
Bromofluorobenzene	98.4

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 2 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER038

Client Sample ID: MW-5

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/24/14

Date Received: 7/25/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	1.4 J2	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

Surrogate % Recovery

Dibromofluoromethane	124
1,2-Dichloroethane-D4	132
Toluene-D8	102
Bromofluorobenzene	96.8

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

J2= The compound was detected and verified by its' mass spectrum at a concentration between the RL and the MDL.

ChemSolutions LLC
 TABLE 2 (Page 2 of 2)
 SAMPLE RESULTS
 Project ID: TER038

Client Sample ID: MW-5
 Client Project ID: 24149141 Airport

Date Sampled: 7/24/14
 Date Received: 7/25/14
 Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Arsenic	ND	10.0	ug/L	7/29/2014	6010C
Barium	583	10.0	ug/L	7/29/2014	6010C
Cadmium	ND	1.0	ug/L	7/31/2014	6010C
Chromium	6.5	5.0	ug/L	7/31/2014	6010C
Iron	1020	50.0	ug/L	7/29/2014	6010C
Lead	ND	5.0	ug/L	7/31/2014	6010C
Selenium	ND	15.0	ug/L	7/29/2014	6010C
Silver	ND	7.0	ug/L	7/29/2014	6010C
Mercury	ND	0.20	ug/L	7/29/2014	7470
Iron, Dissolved	ND	50.0	ug/L	8/1/2014	6010C
Nitrate	4.37	0.02	mg/L	7/25/2014	300.0
Nitrite	ND	0.01	mg/L	7/25/2014	300.0
Sulfate	60.4	0.01	mg/L	7/25/2014	300.0
Sulfite	ND H	2.0	mg/L	7/26/2014	SM 4500-SO3B
Total Organic Carbon	1.2	1.0	mg/L	7/30/2014	SM 5310C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	96.2		8015C-GRO		
1-chlorooctadecane	76.0		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 3 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER038

Client Sample ID: DUP-2

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/24/14

Date Received: 7/25/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	1.5 J2	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	123
1,2-Dichloroethane-D4	132
Toluene-D8	104
Bromofluorobenzene	97.8

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

J2= The compound was detected and verified by its' mass spectrum at a concentration between the RL and the MDL.

ChemSolutions LLC
 TABLE 3 (Page 2 of 2)
 SAMPLE RESULTS
 Project ID: TER038

Client Sample ID: DUP-2
 Client Project ID: 24149141 Airport

Date Sampled: 7/24/14
 Date Received: 7/25/14
 Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Arsenic	ND	10.0	ug/L	7/29/2014	6010C
Barium	590	10.0	ug/L	7/29/2014	6010C
Cadmium	ND	1.0	ug/L	7/31/2014	6010C
Chromium	5.5	5.0	ug/L	7/31/2014	6010C
Iron	536	50.0	ug/L	7/29/2014	6010C
Lead	ND	5.0	ug/L	7/31/2014	6010C
Selenium	ND	15.0	ug/L	7/29/2014	6010C
Silver	ND	7.0	ug/L	7/29/2014	6010C
Mercury	ND	0.20	ug/L	7/29/2014	7470
Iron, Dissolved	ND	50.0	ug/L	8/1/2014	6010C
Nitrate	4.43	0.02	mg/L	7/25/2014	300.0
Nitrite	ND	0.01	mg/L	7/25/2014	300.0
Sulfate	61.2	0.01	mg/L	7/25/2014	300.0
Sulfite	ND H	2.0	mg/L	7/26/2014	SM 4500-SO3B
Total Organic Carbon	1.1	1.0	mg/L	7/30/2014	SM 5310C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>			
1-chlorooctane	93.8	8015C-GRO			
1-chlorooctadecane	79.0	8015C-DRO			

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 4
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER038

Client Sample ID: Equip Blank-2

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/24/14

Date Received: 7/25/14

Date Analyzed: 7/31/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	122
1,2-Dichloroethane-D4	132
Toluene-D8	103
Bromofluorobenzene	97.4

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 5
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER038

Client Sample ID: FB-2

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/24/14

Date Received: 7/25/14

Date Analyzed: 7/31/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	123
1,2-Dichloroethane-D4	132
Toluene-D8	104
Bromofluorobenzene	96.0

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 6 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER038

Client Sample ID: MW-6

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/24/14

Date Received: 7/25/14

Date Analyzed: 7/30/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	125
1,2-Dichloroethane-D4	132
Toluene-D8	104
Bromofluorobenzene	101

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 6 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER038

Client Sample ID: MW-6
Client Project ID: 24149141 Airport

Date Sampled: 7/24/14
Date Received: 7/25/14
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Arsenic	27.7	10.0	ug/L	7/29/2014	6010C
Barium	1710	10.0	ug/L	7/29/2014	6010C
Cadmium	ND	1.0	ug/L	7/31/2014	6010C
Chromium	64.5	5.0	ug/L	7/31/2014	6010C
Iron	61900	50.0	ug/L	7/29/2014	6010C
Lead	42.4	5.0	ug/L	7/31/2014	6010C
Selenium	ND	15.0	ug/L	7/29/2014	6010C
Silver	ND	7.0	ug/L	7/29/2014	6010C
Mercury	ND	0.20	ug/L	7/29/2014	7470
Iron, Dissolved	ND	50.0	ug/L	8/1/2014	6010C
Nitrate	5.21	0.02	mg/L	7/25/2014	300.0
Nitrite	ND	0.01	mg/L	7/25/2014	300.0
Sulfate	29.3	0.01	mg/L	7/25/2014	300.0
Sulfite	ND H	2.0	mg/L	7/26/2014	SM 4500-SO3B
Total Organic Carbon	ND	1.0	mg/L	7/30/2014	SM 5310C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	96.5		8015C-GRO		
1-chlorooctadecane	89.8		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 7 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER038

Client Sample ID: MW-4

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/24/14

Date Received: 7/25/14

Date Analyzed: 7/31/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	9.3	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	123
1,2-Dichloroethane-D4	130
Toluene-D8	104
Bromofluorobenzene	97.6

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 7 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER038

Client Sample ID: MW-4
Client Project ID: 24149141 Airport

Date Sampled: 7/24/14
Date Received: 7/25/14
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Arsenic	ND	10.0	ug/L	7/29/2014	6010C
Barium	168	10.0	ug/L	7/29/2014	6010C
Cadmium	ND	1.0	ug/L	7/31/2014	6010C
Chromium	10.8	5.0	ug/L	7/31/2014	6010C
Iron	12500	50.0	ug/L	7/29/2014	6010C
Lead	10.9	5.0	ug/L	7/31/2014	6010C
Selenium	ND	15.0	ug/L	7/29/2014	6010C
Silver	ND	7.0	ug/L	7/29/2014	6010C
Mercury	ND	0.20	ug/L	7/29/2014	7470
Iron, Dissolved	ND	50.0	ug/L	8/1/2014	6010C
Nitrate	2.42	0.02	mg/L	7/25/2014	300.0
Nitrite	ND	0.01	mg/L	7/25/2014	300.0
Sulfate	37.7	0.01	mg/L	7/25/2014	300.0
Sulfite	ND H	2.0	mg/L	7/26/2014	SM 4500-SO3B
Total Organic Carbon	3.1	1.0	mg/L	7/30/2014	SM 5310C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	91.1		8015C-GRO		
1-chlorooctadecane	89.4		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 8 (Page 1 of 2)
METHOD BLANK RESULTS
Project ID: TER038

Sample ID: Blank
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/30/14
Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453	trans-1,3-Dichloropropene	ND J1	5	0.212		
Chloromethane	ND	5	0.510	1,1,2-Trichloroethane	ND	2	0.257		
Vinyl Chloride	ND	2	0.798	Tetrachloroethene	ND	2	0.678		
Bromomethane	ND	5	0.460	Dibromochloromethane	ND	5	0.398		
Chloroethane	ND	5	0.557	1,2-Dibromoethane	ND	5	0.312		
Trichlorofluoromethane	ND	5	0.674	Chlorobenzene	ND	2	0.156		
Acetone	ND	20	0.627	1,1,1,2-Tetrachloroethane	ND	5	0.413		
1,1-Dichloroethene	ND	5	0.256	Ethylbenzene	ND	5	0.251		
Carbon Disulfide	ND	5	0.367	Total Xylene	ND	5	0.523		
Methyl-tert-butyl ether	ND	2	1.252	Styrene	ND	5	0.344		
Methylene Chloride	ND	5	0.511	Isopropylbenzene	ND	5	0.315		
trans-1,2-Dichloroethene	ND	2	0.601	Bromoform	ND	5	0.628		
1,1-Dichloroethane	ND	2	0.440	n-Propylbenzene	ND	5	0.300		
Vinyl acetate	ND	10	1.006	1,2,3-Trichloropropane	ND	5	0.501		
2-Butanone	ND	10	1.077	2-Chlorotoluene	ND	5	0.572		
cis-1,2-Dichloroethene	ND	2	0.404	1,3,5-Trimethylbenzene	ND	5	0.351		
Chloroform	ND	5	0.343	4-Chlorotoluene	ND	5	0.195		
Tetrahydrofuran	ND	10	0.910	t-Butylbenzene	ND	5	0.242		
1,1,1-Trichloroethane	ND	2	0.381	1,2,4-Trimethylbenzene	ND	5	0.263		
Carbon Tetrachloride	ND	2	0.598	sec-Butylbenzene	ND	5	0.413		
Benzene	ND	2	0.417	p-Isopropyltoluene	ND	5	0.285		
1,2-Dichloroethane	ND	2	0.341	1,1,2,2-Tetrachloroethane	ND J1	5	0.477		
Trichloroethene	ND	2	0.270	1,3-Dichlorobenzene	ND	5	0.215		
1,2-Dichloropropane	ND	5	0.295	1,4-Dichlorobenzene	ND	5	0.213		
Dibromomethane	ND	5	0.383	n-Butylbenzene	ND	5	0.305		
Bromodichloromethane	ND	5	0.199	1,2 Dichlorobenzene	ND	5	0.345		
cis-1,3-Dichloropropene	ND J1	2	0.228	1,2-Dibromo-3-chloropropane	ND	5	0.877		
4-Methyl-2-pentanone	ND	10	1.249	1,2,4-Trichlorobenzene	ND	5	0.223		
Toluene	ND	5	0.279	Hexachlorobutadiene	ND	5	0.537		
2-Hexanone	ND	10	1.413	1,2,3-Trichlorobenzene	ND	5	0.392		
				Naphthalene	ND	5	0.320		

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	108
1,2-Dichloroethane-D4	115
Toluene-D8	100
Bromofluorobenzene	101

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 8 (Page 2 of 2)
METHOD BLANK RESULTS
Project ID: TER038

Sample ID: Blank
Client Project ID: 24149141 Airport
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	7/25/2014	8015C
TPH-DRO	ND	0.5	mg/L	7/29/2014	8015C
Methane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethane	ND	0.010	mg/L	8/4/2014	RSK 175
Ethene	ND	0.010	mg/L	8/4/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	132		8015C-GRO		
1-chlorooctadecane	95.6		8015C-DRO		

ND= Not detected at or above the reporting limit.

ChemSolutions LLC
TABLE 9 (Page 1 of 2)
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER038

Sample ID: Water LCS
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/30/14
Sample Matrix: Water

<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>	<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	50.0	100
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	62.4	125	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	56.9	114	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	50.8	102	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	51.0	102	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	114
1,2-Dichloroethane-D4	121
Toluene-D8	100
Bromofluorobenzene	102

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC
TABLE 9 (Page 2 of 2)
LCS Spike Results
Project ID: TER038

Client Project ID: 24149141 Airport
 Sample Matrix: Water

EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
TPH-GRO	2.11	106	mg/L

Surrogate Recoveries

1-Chlorooctane	45.5	91.0	ug/L
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EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
TPH-DRO	5.55	97.2	mg/L

Surrogate Recoveries

1-Chlorooctadecane	50.0	100	mg/L
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EPA Method RSK175

<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
Methane	0.180	81.5	mg/L
Ethane	0.365	88.3	mg/L
Ethene	0.334	86.6	mg/L

LCS = Laboratory Control Sample

ChemSolutions LLC
 TABLE 10 (Page 1 of 3)
MATRIX SPIKE RESULTS
 Project ID: TER038

Client Sample ID: NA
 Client Project ID: 24149141 Airport
 EPA Method 8260C
 Units: ug/L
 Spike Amount: 50 ug/L

Date Sampled: NA
 Date Received: NA
 Date Analyzed: 7/30/14
 Sample Matrix: Water

<u>Analyte</u>	Amount Recovered	% Recovery	<u>Analyte</u>	Amount Recovered	% Recovery
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	11	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	52.6	105
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	62.4	125	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	58.9	118	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	54.9	102	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	52.3	105	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

Sample concentration Trichloroethene=3.9ug/L

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	115
1,2-Dichloroethane-D4	123
Toluene-D8	99.9
Bromofluorobenzene	102

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC
TABLE 10 (Page 2 of 3)
MATRIX SPIKE DUPLICATE RESULTS
Project ID: TER038

Client Sample ID: NA
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 7/30/14
Sample Matrix: Water

Analyte	Amount Recovered	% Recovery	RPD	Analyte	Amount Recovered	% Recovery	RPD
Dichlorodifluoromethane	ND	NA	NA	trans-1,3-Dichloropropene	ND	NA	NA
Chloromethane	ND	NA	NA	1,1,2-Trichloroethane	ND	NA	NA
Vinyl Chloride	ND	NA	NA	Tetrachloroethene	9.1	NA	NA
Bromomethane	ND	NA	NA	Dibromochloromethane	ND	NA	NA
Chloroethane	ND	NA	NA	1,2-Dibromoethane	ND	NA	NA
Trichlorofluoromethane	ND	NA	NA	Chlorobenzene	54.0	108	2.6
Acetone	ND	NA	NA	1,1,1,2-Tetrachloroethane	ND	NA	NA
1,1-Dichloroethene	61.5	123	1.5	Ethylbenzene	ND	NA	NA
Carbon Disulfide	ND	NA	NA	Total Xylene	ND	NA	NA
Methyl-tert-butyl ether	ND	NA	NA	Styrene	ND	NA	NA
Methylene Chloride	ND	NA	NA	Isopropylbenzene	ND	NA	NA
trans-1,2-Dichloroethene	ND	NA	NA	Bromoform	ND	NA	NA
1,1-Dichloroethane	ND	NA	NA	n-Propylbenzene	ND	NA	NA
Vinyl acetate	ND	NA	NA	1,2,3-Trichloropropane	ND	NA	NA
2-Butanone	ND	NA	NA	2-Chlorotoluene	ND	NA	NA
cis-1,2-Dichloroethene	ND	NA	NA	1,3,5-Trimethylbenzene	ND	NA	NA
Chloroform	ND	NA	NA	4-Chlorotoluene	ND	NA	NA
Tetrahydrofuran	ND	NA	NA	t-Butylbenzene	ND	NA	NA
1,1,1-Trichloroethane	ND	NA	NA	1,2,4-Trimethylbenzene	ND	NA	NA
Carbon Tetrachloride	ND	NA	NA	sec-Butylbenzene	ND	NA	NA
Benzene	59.4	119	0.8	p-Isopropyltoluene	ND	NA	NA
1,2-Dichloroethane	ND	NA	NA	1,1,2,2-Tetrachloroethane	ND	NA	NA
Trichloroethene	54.8	102	0.2	1,3-Dichlorobenzene	ND	NA	NA
1,2-Dichloropropane	ND	NA	NA	1,4-Dichlorobenzene	ND	NA	NA
Dibromomethane	ND	NA	NA	n-Butylbenzene	ND	NA	NA
Bromodichloromethane	ND	NA	NA	1,2 Dichlorobenzene	ND	NA	NA
cis-1,3-Dichloropropene	ND	NA	NA	1,2-Dibromo-3-chloropropane	ND	NA	NA
4-Methyl-2-pentanone	ND	NA	NA	1,2,4-Trichlorobenzene	ND	NA	NA
Toluene	53.8	108	2.8	Hexachlorobutadiene	ND	NA	NA
2-Hexanone	ND	NA	NA	1,2,3-Trichlorobenzene	ND	NA	NA
				Naphthalene	ND	NA	NA

Sample concentration Trichloroethene=3.9ug/L

Surrogate	% Recovery
Dibromofluoromethane	111
1,2-Dichloroethane-D4	121
Toluene-D8	99.9
Bromofluorobenzene	101

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC

Table 10 (Page 3 of 3)
 Matrix Spike Results
 Project ID: TER038

Client Project ID: 24149141 Airport

Sample Matrix: Water

Date Sampled: NA

Date Received: NA

EPA Method 8015C

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	Date Analyzed: 7/25/14	<u>UNITS</u>
TPH-GRO	1.83	91.5	2.10	105	13.74	mg/L

Surrogate Recoveries

1-Chlorooctane	36.6	73.2	43.3	86.6	NA	ug/L
----------------	------	------	------	------	----	------

EPA Method 8015C

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	Date Analyzed: 7/29/14	<u>UNITS</u>
TPH-DRO	4.70	82.3	4.39	76.9	6.82	mg/L

Surrogate Recoveries

1-Chlorooctadecane	48.5	97.0	48.7	97.4	NA	mg/L
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EPA Method RSK175

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	Date Analyzed: 8/4/14	<u>UNITS</u>
Methane	0.171	77.7	0.174	79.2	1.74	mg/L
Ethane	0.320	77.5	0.327	79.2	2.16	mg/L
Methane	0.299	77.7	0.298	77.4	0.34	mg/L

%RPD = % Relative Percent Difference, NA = Not Applicable

End of Report

Chain of Custody



Client Name & Address: D.E.R. Airport		Client Project Name & Location: Tieback 1505 Old Happy Jack Road Cheyenne, WY 82001				ChemSolutions Project #: TER038		
Contact:						Location Received: base lab		
Phone #:		Sampler: Jeff Shipman				Custody Seals: intact		
E-mail:		Client Project Number: 24149141 Invoice to: Clay Murchison				Temperature Upon Receipt: 0°C		
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative		Remarks
Trip Blank				GW	3			Please see attached for analysis
MW-5	7/24/14	0745		GW	13			
DWP-2	7/24/14	0758		GW	13			
Equip Blank -2	7/24/14	0830		DI	3			
FB-2	7/24/14	0830		DI	3			
MW-6	7/24/14	1005		GW	13			
MW-4	7/24/14	1200		GW	13			
Relinquished by:		Date:	Time:	Received by:			Date:	Time:
Jeff Shipman		7/24/14	1315	Dionisia Bailey			7/25/14	0948
Relinquished by:		Date:	Time:	Received by:			Date:	Time:

Ted EX: 7900 23647 3309

TALKED W/
 USA GRAVES ON 7/22
 THIS
 @ 3:00 PM ABOUT THE
 & SHE IS SENDING THE
 REW) CONTAINERS.
 REV'D THIS AFTERNOON
 7/22

LABORATORY ANALYSIS SUMMARY
 AIRPORT ADDITION AND CHEYENNE STEAM LAUNDRY
 Revised 7/22/2014

AIRPORT ADDITION							
Analyte	Laboratory Method	Existing MWs		Temporary MWs		New Permanent MWs	Soil Vapor Points
		GW	Soil	GW	Soil	GW	Vapor
Complete List of VOCs	EPA 8260	STAT	Rush	Rush	STAT	STAT	
TPH-GRO and DRO	EPA 8015	STAT			STAT	STAT	
RCRA 8 Metals	EPA 6010	STAT			STAT	STAT	
Fe ⁺² /Fe ⁺³	Standard Method 3500 and EPA Method 6010					STAT	
SO ₄ /SO ₃	EPA Method 300 and Standard Method 4500					STAT	
NO ₃ /NO ₂	EPA Method 300					STAT	
Total Organic Carbon	EPA Method 9060					STAT	
Methane, Ethane, Ethene	RSK 175					STAT	
Select List of VOCs	TO 15 or 8260						STAT

CHEYENNE STEAM LAUNDRY							
Analyte	Laboratory Method	Existing MWs		Temporary MWs		New Permanent MWs	Soil Vapor Points
		GW	Soil	GW	Soil	GW	Vapor
Complete List of VOCs	EPA 8260	STAT	Rush	Rush	STAT	STAT	
TPH-GRO and DRO	EPA 8015	STAT			STAT	STAT	
Fe ⁺² /Fe ⁺³	Standard Method 3500 and EPA Method 6010					STAT	
SO ₄ /SO ₃	EPA Method 300 and Standard Method 4500					STAT	
NO ₃ /NO ₂	EPA Method 300					STAT	
Total Organic Carbon	EPA Method 9060					STAT	
Methane, Ethane, Ethene	RSK 175					STAT	
Select List of VOCs	TO 15 or 8260						STAT

Notes:

1. MW = monitoring well
2. GW = groundwater
3. STAT = Standard laboratory turn-around time
4. Rush = Overnight analytical results required.
5. Select list of VOCs = only those VOC constituents above lab detection limits in collected soil and GW samples.

ADDE)



ChemSolutions

7388 S. Revere Parkway #806
Centennial, CO 80112
303.771.5570

August 14, 2014

Clay Muirhead
Terracon
1505 Old Happy Jack Road
Cheyenne, WY 82001

RE: TER040-Airport

Dear Clay,

Enclosed please find the analytical results for the Project #24149141 Airport water samples collected on 7/31/14.

Tables 1-5 contain the analytical results for the sample. The quality control samples are summarized in Tables 6-8.

Thank you for the opportunity to work on this project. Please call if you have any questions. The invoice will be sent separately.

Sincerely,

John Graves
Laboratory Director
ChemSolutions LLC

ChemSolutions LLC
TABLE 1 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER040

Client Sample ID: MW-2

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/31/14

Date Received: 8/1/14

Date Analyzed: 8/5/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	70	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	119
1,2-Dichloroethane-D4	129
Toluene-D8	104
Bromofluorobenzene	106

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC

TABLE 1 (Page 2 of 2)

SAMPLE RESULTS

Project ID: TER040

Client Sample ID: MW-2

Client Project ID: 24149141 Airport

Date Sampled: 7/31/14

Date Received: 8/1/14

Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	8/1/2014	8015C
TPH-DRO	ND	0.5	mg/L	8/1/2014	8015C
Arsenic	ND	10.0	ug/L	8/7/2014	6010C
Barium	264	10.0	ug/L	8/7/2014	6010C
Cadmium	ND	1.0	ug/L	8/12/2014	6010C
Chromium	12.2	5.0	ug/L	8/12/2014	6010C
Iron	517	50.0	ug/L	8/7/2014	6010C
Lead	ND	5.0	ug/L	8/12/2014	6010C
Selenium	ND	15.0	ug/L	8/7/2014	6010C
Silver	ND	7.0	ug/L	8/7/2014	6010C
Mercury	ND	0.20	ug/L	8/13/2014	7470
Iron, Dissolved	ND	50.0	ug/L	8/7/2014	6010C
Nitrate	1.38	0.02	mg/L	8/1/2014	300.0
Nitrite	ND	0.01	mg/L	8/1/2014	300.0
Sulfate	102	0.01	mg/L	8/1/2014	300.0
Sulfite	ND H	2.0	mg/L	8/2/2014	SM 4500-SO3B
Total Organic Carbon	4.4	1.0	mg/L	8/7/2014	SM 5310C
Methane	ND	0.010	mg/L	8/5/2014	RSK 175
Ethane	ND	0.010	mg/L	8/5/2014	RSK 175
Ethene	ND	0.010	mg/L	8/5/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	104		8015C-GRO		
1-chlorooctadecane	74.7		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 2 (Page 1 of 2)
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER040

Client Sample ID: DUP-4

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/31/14

Date Received: 8/1/14

Date Analyzed: 8/5/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	75	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	114
1,2-Dichloroethane-D4	121
Toluene-D8	104
Bromofluorobenzene	107

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 2 (Page 2 of 2)
SAMPLE RESULTS
Project ID: TER040

Client Sample ID: DUP-4
Client Project ID: 24149141 Airport

Date Sampled: 7/31/14
Date Received: 8/1/14
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	8/1/2014	8015C
TPH-DRO	ND	0.5	mg/L	8/1/2014	8015C
Arsenic	ND	10.0	ug/L	8/7/2014	6010C
Barium	260	10.0	ug/L	8/7/2014	6010C
Cadmium	ND	1.0	ug/L	8/12/2014	6010C
Chromium	12.3	5.0	ug/L	8/12/2014	6010C
Iron	172	50.0	ug/L	8/7/2014	6010C
Lead	ND	5.0	ug/L	8/12/2014	6010C
Selenium	ND	15.0	ug/L	8/7/2014	6010C
Silver	ND	7.0	ug/L	8/7/2014	6010C
Mercury	ND	0.20	ug/L	8/13/2014	7470
Iron, Dissolved	ND	50.0	ug/L	8/7/2014	6010C
Nitrate	1.35	0.02	mg/L	8/1/2014	300.0
Nitrite	ND	0.01	mg/L	8/1/2014	300.0
Sulfate	100	0.01	mg/L	8/1/2014	300.0
Sulfite	ND H	2.0	mg/L	8/2/2014	SM 4500-SO3B
Total Organic Carbon	4.3	1.0	mg/L	8/7/2014	SM 5310C
Methane	ND	0.010	mg/L	8/5/2014	RSK 175
Ethane	ND	0.010	mg/L	8/5/2014	RSK 175
Ethene	ND	0.010	mg/L	8/5/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	108		8015C-GRO		
1-chlorooctadecane	64.2		8015C-DRO		

ND= Not detected at or above the reporting limit.

H= Analysis initiated outside the recommended holding time.

Metals, sulfite and TOC analyses performed by Pace. IC analyses performed by CAL.

ChemSolutions LLC
TABLE 3
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER040

Client Sample ID: Equip Blank-4

Date Sampled: 7/31/14

Client Project ID: 24149141 Airport

Date Received: 8/1/14

EPA Method 8260C

Date Analyzed: 8/5/14

Units: ug/L

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

Surrogate % Recovery

Dibromofluoromethane	117
1,2-Dichloroethane-D4	124
Toluene-D8	103
Bromofluorobenzene	107

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

J2= The compound was detected and verified by its' mass spectrum at a concentration between the RL and the MDL.

ChemSolutions LLC
TABLE 4
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER040

Client Sample ID: FB-4

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: 7/31/14

Date Received: 8/1/14

Date Analyzed: 8/5/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	120
1,2-Dichloroethane-D4	128
Toluene-D8	107
Bromofluorobenzene	105

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

J2= The compound was detected and verified by its' mass spectrum at a concentration between the RL and the MDL.

ChemSolutions LLC
TABLE 5
VOLATILE ORGANIC COMPOUND RESULTS
Project ID: TER040

Client Sample ID: Trip Blank

Client Project ID: 24149141 Airport

EPA Method 8260C

Units: ug/L

Date Sampled: NA

Date Received: 8/1/14

Date Analyzed: 8/5/14

Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453		trans-1,3-Dichloropropene	ND J1	5	0.212	
Chloromethane	ND	5	0.510		1,1,2-Trichloroethane	ND	2	0.257	
Vinyl Chloride	ND	2	0.798		Tetrachloroethene	ND	2	0.678	
Bromomethane	ND	5	0.460		Dibromochloromethane	ND	5	0.398	
Chloroethane	ND	5	0.557		1,2-Dibromoethane	ND	5	0.312	
Trichlorofluoromethane	ND	5	0.674		Chlorobenzene	ND	2	0.156	
Acetone	ND	20	0.627		1,1,1,2-Tetrachloroethane	ND	5	0.413	
1,1-Dichloroethene	ND	5	0.256		Ethylbenzene	ND	5	0.251	
Carbon Disulfide	ND	5	0.367		Total Xylene	ND	5	0.523	
Methyl-tert-butyl ether	ND	2	1.252		Styrene	ND	5	0.344	
Methylene Chloride	ND	5	0.511		Isopropylbenzene	ND	5	0.315	
trans-1,2-Dichloroethene	ND	2	0.601		Bromoform	ND	5	0.628	
1,1-Dichloroethane	ND	2	0.440		n-Propylbenzene	ND	5	0.300	
Vinyl acetate	ND	10	1.006		1,2,3-Trichloropropane	ND	5	0.501	
2-Butanone	ND	10	1.077		2-Chlorotoluene	ND	5	0.572	
cis-1,2-Dichloroethene	ND	2	0.404		1,3,5-Trimethylbenzene	ND	5	0.351	
Chloroform	ND	5	0.343		4-Chlorotoluene	ND	5	0.195	
Tetrahydrofuran	ND	10	0.910		t-Butylbenzene	ND	5	0.242	
1,1,1-Trichloroethane	ND	2	0.381		1,2,4-Trimethylbenzene	ND	5	0.263	
Carbon Tetrachloride	ND	2	0.598		sec-Butylbenzene	ND	5	0.413	
Benzene	ND	2	0.417		p-Isopropyltoluene	ND	5	0.285	
1,2-Dichloroethane	ND	2	0.341		1,1,2,2-Tetrachloroethane	ND J1	5	0.477	
Trichloroethene	ND	2	0.270		1,3-Dichlorobenzene	ND	5	0.215	
1,2-Dichloropropane	ND	5	0.295		1,4-Dichlorobenzene	ND	5	0.213	
Dibromomethane	ND	5	0.383		n-Butylbenzene	ND	5	0.305	
Bromodichloromethane	ND	5	0.199		1,2 Dichlorobenzene	ND	5	0.345	
cis-1,3-Dichloropropene	ND J1	2	0.228		1,2-Dibromo-3-chloropropane	ND	5	0.877	
4-Methyl-2-pentanone	ND	10	1.249		1,2,4-Trichlorobenzene	ND	5	0.223	
Toluene	ND	5	0.279		Hexachlorobutadiene	ND	5	0.537	
2-Hexanone	ND	10	1.413		1,2,3-Trichlorobenzene	ND	5	0.392	
					Naphthalene	ND	5	0.320	

Surrogate % Recovery

Dibromofluoromethane	116
1,2-Dichloroethane-D4	126
Toluene-D8	103
Bromofluorobenzene	106

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

J2= The compound was detected and verified by its' mass spectrum at a concentration between the RL and the MDL.

ChemSolutions LLC
TABLE 6 (Page 1 of 2)
METHOD BLANK RESULTS
Project ID: TER040

Sample ID: Blank
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 8/5/14
Sample Matrix: Water

<u>Analyte</u>	<u>Concentration</u>	Reporting			<u>Analyte</u>	<u>Concentration</u>	Reporting		
		<u>Limit</u>	<u>MDL</u>				<u>Limit</u>	<u>MDL</u>	
Dichlorodifluoromethane	ND	5	0.453	trans-1,3-Dichloropropene	ND J1	5	0.212		
Chloromethane	ND	5	0.510	1,1,2-Trichloroethane	ND	2	0.257		
Vinyl Chloride	ND	2	0.798	Tetrachloroethene	ND	2	0.678		
Bromomethane	ND	5	0.460	Dibromochloromethane	ND	5	0.398		
Chloroethane	ND	5	0.557	1,2-Dibromoethane	ND	5	0.312		
Trichlorofluoromethane	ND	5	0.674	Chlorobenzene	ND	2	0.156		
Acetone	ND	20	0.627	1,1,1,2-Tetrachloroethane	ND	5	0.413		
1,1-Dichloroethene	ND	5	0.256	Ethylbenzene	ND	5	0.251		
Carbon Disulfide	ND	5	0.367	Total Xylene	ND	5	0.523		
Methyl-tert-butyl ether	ND	2	1.252	Styrene	ND	5	0.344		
Methylene Chloride	ND	5	0.511	Isopropylbenzene	ND	5	0.315		
trans-1,2-Dichloroethene	ND	2	0.601	Bromoform	ND	5	0.628		
1,1-Dichloroethane	ND	2	0.440	n-Propylbenzene	ND	5	0.300		
Vinyl acetate	ND	10	1.006	1,2,3-Trichloropropane	ND	5	0.501		
2-Butanone	ND	10	1.077	2-Chlorotoluene	ND	5	0.572		
cis-1,2-Dichloroethene	ND	2	0.404	1,3,5-Trimethylbenzene	ND	5	0.351		
Chloroform	ND	5	0.343	4-Chlorotoluene	ND	5	0.195		
Tetrahydrofuran	ND	10	0.910	t-Butylbenzene	ND	5	0.242		
1,1,1-Trichloroethane	ND	2	0.381	1,2,4-Trimethylbenzene	ND	5	0.263		
Carbon Tetrachloride	ND	2	0.598	sec-Butylbenzene	ND	5	0.413		
Benzene	ND	2	0.417	p-Isopropyltoluene	ND	5	0.285		
1,2-Dichloroethane	ND	2	0.341	1,1,2,2-Tetrachloroethane	ND J1	5	0.477		
Trichloroethene	ND	2	0.270	1,3-Dichlorobenzene	ND	5	0.215		
1,2-Dichloropropane	ND	5	0.295	1,4-Dichlorobenzene	ND	5	0.213		
Dibromomethane	ND	5	0.383	n-Butylbenzene	ND	5	0.305		
Bromodichloromethane	ND	5	0.199	1,2 Dichlorobenzene	ND	5	0.345		
cis-1,3-Dichloropropene	ND J1	2	0.228	1,2-Dibromo-3-chloropropane	ND	5	0.877		
4-Methyl-2-pentanone	ND	10	1.249	1,2,4-Trichlorobenzene	ND	5	0.223		
Toluene	ND	5	0.279	Hexachlorobutadiene	ND	5	0.537		
2-Hexanone	ND	10	1.413	1,2,3-Trichlorobenzene	ND	5	0.392		
				Naphthalene	ND	5	0.320		

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	108
1,2-Dichloroethane-D4	117
Toluene-D8	103
Bromofluorobenzene	110

ND= Not detected at or above the reporting limit.

ND J1= Not detected at or above the MDL.

MDL= Method Detection Limit.

ChemSolutions LLC
TABLE 6 (Page 2 of 2)
METHOD BLANK RESULTS
Project ID: TER040

Sample ID: Blank
Client Project ID: 24149141 Airport
Sample Matrix: Water

<u>ANALYTE</u>	<u>Concentration</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
TPH-GRO	ND	0.5	mg/L	8/1/2014	8015C
TPH-DRO	ND	0.5	mg/L	8/1/2014	8015C
Methane	ND	0.010	mg/L	8/5/2014	RSK 175
Ethane	ND	0.010	mg/L	8/5/2014	RSK 175
Ethene	ND	0.010	mg/L	8/5/2014	RSK 175
<u>Surrogate Recoveries</u>	<u>% Recovery</u>		<u>Method</u>		
1-chlorooctane	105		8015C-GRO		
1-chlorooctadecane	91.5		8015C-DRO		

ND= Not detected at or above the reporting limit.

ChemSolutions LLC
TABLE 7 (Page 1 of 2)
LABORATORY CONTROL SAMPLE RESULTS
Project ID: TER040

Sample ID: Water LCS
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 8/5/14
Sample Matrix: Water

<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>	<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	ND	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	48.6	97.2
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	65.1	130	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	58.2	116	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	53.0	106	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	53.1	106	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	108
1,2-Dichloroethane-D4	114
Toluene-D8	104
Bromofluorobenzene	108

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC
 TABLE 7 (Page 2 of 2)
 LCS Spike Results
 Project ID: TER040

Client Project ID: 24149141 Airport
 Sample Matrix: Water

EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	Date Analyzed: 8/1/14	<u>UNITS</u>
TPH-GRO	1.94	% RECOVERY	mg/L

Surrogate Recoveries

1-Chlorooctane	51.6	103	ug/L
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EPA Method 8015C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	Date Analyzed: 8/1/14	<u>UNITS</u>
TPH-DRO	5.57	% RECOVERY	mg/L

Surrogate Recoveries

1-Chlorooctadecane	48.8	97.6	mg/L
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EPA Method RSK175

<u>ANALYTE</u>	<u>LCS SPIKE</u>	Date Analyzed:	<u>UNITS</u>
Methane	0.161	% RECOVERY	mg/L
Ethane	0.316	73.2	mg/L
Ethene	0.309	76.5	mg/L
		80.1	mg/L

LCS = Laboratory Control Sample

ChemSolutions LLC
TABLE 8 (Page 1 of 3)
MATRIX SPIKE RESULTS
Project ID: TER040

Client Sample ID: NA
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 8/5/14
Sample Matrix: Water

<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>	<u>Analyte</u>	<u>Amount Recovered</u>	<u>% Recovery</u>
Dichlorodifluoromethane	ND	NA	trans-1,3-Dichloropropene	ND	NA
Chloromethane	ND	NA	1,1,2-Trichloroethane	ND	NA
Vinyl Chloride	ND	NA	Tetrachloroethene	7.7	NA
Bromomethane	ND	NA	Dibromochloromethane	ND	NA
Chloroethane	ND	NA	1,2-Dibromoethane	ND	NA
Trichlorofluoromethane	ND	NA	Chlorobenzene	46.5	93.0
Acetone	ND	NA	1,1,1,2-Tetrachloroethane	ND	NA
1,1-Dichloroethene	63.4	127	Ethylbenzene	ND	NA
Carbon Disulfide	ND	NA	Total Xylene	ND	NA
Methyl-tert-butyl ether	ND	NA	Styrene	ND	NA
Methylene Chloride	ND	NA	Isopropylbenzene	ND	NA
trans-1,2-Dichloroethene	ND	NA	Bromoform	ND	NA
1,1-Dichloroethane	ND	NA	n-Propylbenzene	ND	NA
Vinyl acetate	ND	NA	1,2,3-Trichloropropane	ND	NA
2-Butanone	ND	NA	2-Chlorotoluene	ND	NA
cis-1,2-Dichloroethene	ND	NA	1,3,5-Trimethylbenzene	ND	NA
Chloroform	ND	NA	4-Chlorotoluene	ND	NA
Tetrahydrofuran	ND	NA	t-Butylbenzene	ND	NA
1,1,1-Trichloroethane	ND	NA	1,2,4-Trimethylbenzene	ND	NA
Carbon Tetrachloride	ND	NA	sec-Butylbenzene	ND	NA
Benzene	58.2	116	p-Isopropyltoluene	ND	NA
1,2-Dichloroethane	ND	NA	1,1,2,2-Tetrachloroethane	ND	NA
Trichloroethene	52.0	104	1,3-Dichlorobenzene	ND	NA
1,2-Dichloropropane	ND	NA	1,4-Dichlorobenzene	ND	NA
Dibromomethane	ND	NA	n-Butylbenzene	ND	NA
Bromodichloromethane	ND	NA	1,2 Dichlorobenzene	ND	NA
cis-1,3-Dichloropropene	ND	NA	1,2-Dibromo-3-chloropropane	ND	NA
4-Methyl-2-pentanone	ND	NA	1,2,4-Trichlorobenzene	ND	NA
Toluene	51.3	103	Hexachlorobutadiene	ND	NA
2-Hexanone	ND	NA	1,2,3-Trichlorobenzene	ND	NA
			Naphthalene	ND	NA

<u>Surrogate</u>	<u>% Recovery</u>
Dibromofluoromethane	111
1,2-Dichloroethane-D4	118
Toluene-D8	104
Bromofluorobenzene	107

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC
TABLE 8 (Page 2 of 3)
MATRIX SPIKE DUPLICATE RESULTS
Project ID: TER040

Client Sample ID: NA
Client Project ID: 24149141 Airport
EPA Method 8260C
Units: ug/L
Spike Amount: 50 ug/L

Date Sampled: NA
Date Received: NA
Date Analyzed: 8/5/14
Sample Matrix: Water

<u>Analyte</u>	Amount Recovered	% Recovery	RPD	<u>Analyte</u>	Amount Recovered	% Recovery	RPD
Dichlorodifluoromethane	ND	NA	NA	trans-1,3-Dichloropropene	ND	NA	NA
Chloromethane	ND	NA	NA	1,1,2-Trichloroethane	ND	NA	NA
Vinyl Chloride	ND	NA	NA	Tetrachloroethene	8.1	NA	NA
Bromomethane	ND	NA	NA	Dibromochloromethane	ND	NA	NA
Chloroethane	ND	NA	NA	1,2-Dibromoethane	ND	NA	NA
Trichlorofluoromethane	ND	NA	NA	Chlorobenzene	50.7	101	8.6
Acetone	ND	NA	NA	1,1,1,2-Tetrachloroethane	ND	NA	NA
1,1-Dichloroethene	67.4	135	6.1	Ethylbenzene	ND	NA	NA
Carbon Disulfide	ND	NA	NA	Total Xylene	ND	NA	NA
Methyl-tert-butyl ether	ND	NA	NA	Styrene	ND	NA	NA
Methylene Chloride	ND	NA	NA	Isopropylbenzene	ND	NA	NA
trans-1,2-Dichloroethene	ND	NA	NA	Bromoform	ND	NA	NA
1,1-Dichloroethane	ND	NA	NA	n-Propylbenzene	ND	NA	NA
Vinyl acetate	ND	NA	NA	1,2,3-Trichloropropane	ND	NA	NA
2-Butanone	ND	NA	NA	2-Chlorotoluene	ND	NA	NA
cis-1,2-Dichloroethene	ND	NA	NA	1,3,5-Trimethylbenzene	ND	NA	NA
Chloroform	ND	NA	NA	4-Chlorotoluene	ND	NA	NA
Tetrahydrofuran	ND	NA	NA	t-Butylbenzene	ND	NA	NA
1,1,1-Trichloroethane	ND	NA	NA	1,2,4-Trimethylbenzene	ND	NA	NA
Carbon Tetrachloride	ND	NA	NA	sec-Butylbenzene	ND	NA	NA
Benzene	63.5	127	8.7	p-Isopropyltoluene	ND	NA	NA
1,2-Dichloroethane	ND	NA	NA	1,1,2,2-Tetrachloroethane	ND	NA	NA
Trichloroethene	55.2	110	6.0	1,3-Dichlorobenzene	ND	NA	NA
1,2-Dichloropropane	ND	NA	NA	1,4-Dichlorobenzene	ND	NA	NA
Dibromomethane	ND	NA	NA	n-Butylbenzene	ND	NA	NA
Bromodichloromethane	ND	NA	NA	1,2 Dichlorobenzene	ND	NA	NA
cis-1,3-Dichloropropene	ND	NA	NA	1,2-Dibromo-3-chloropropane	ND	NA	NA
4-Methyl-2-pentanone	ND	NA	NA	1,2,4-Trichlorobenzene	ND	NA	NA
Toluene	55.1	110	7.1	Hexachlorobutadiene	ND	NA	NA
2-Hexanone	ND	NA	NA	1,2,3-Trichlorobenzene	ND	NA	NA
				Naphthalene	ND	NA	NA
Surrogate	% Recovery						
Dibromofluoromethane	113						
1,2-Dichloroethane-D4	120						
Toluene-D8	102						
Bromofluorobenzene	107						

ND = Not Detected, NA = Not Applicable

ChemSolutions LLC

Table 8 (Page 3 of 3)
 Matrix Spike Results
 Project ID: TER040

Client Project ID: 24149141 Airport

Sample Matrix: Water

Date Sampled: NA

Date Received: NA

EPA Method 8015C

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	Date Analyzed: 8/1/14	<u>UNITS</u>
TPH-GRO	1.87	93.5	1.89	94.5	1.06	mg/L

Surrogate Recoveries

1-Chlorooctane	49.4	98.8	50.3	101	NA	ug/L
----------------	------	------	------	-----	----	------

EPA Method 8015C

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	Date Analyzed: 8/1/14	<u>UNITS</u>
TPH-DRO	4.48	78.5	4.67	81.8	4.15	mg/L

Surrogate Recoveries

1-Chlorooctadecane	39.9	79.8	43.5	87.0	NA	mg/L
--------------------	------	------	------	------	----	------

EPA Method RSK175

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	Date Analyzed: 8/5/14	<u>UNITS</u>
Methane	0.202	91.8	0.189	85.9	6.65	mg/L
Ethane	0.344	83.3	0.363	87.9	5.37	mg/L
Methane	0.324	83.9	0.336	87.0	3.64	mg/L

RPD = Relative Percent Difference, NA = Not Applicable

End of Report

Chain of Custody



7388 S. Revere Pkwy, #806

Centennial, CO 80112

Email: john@chemmobile.com

Phone: 303-771-5570

Fax: 303-771-5574

Client Name & Address: DEQ		Client Project Name & Location: TERRACE 1505 Old Happy Jack Rd. Cheyenne, WY 82001				ChemSolutions Project #: TEK040	
Contact:						Location Received: base lab	
Phone #:		Sampler: Jeff Shiman				Custody Seals: intact	
E-mail:		Client Project Number: 24149141 Invoice to: Clay Maierhead				Temperature Upon Receipt: 2°C	
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative	Remarks
						See attached for analysis for both sites	
Airport Site MW-2	7/31/14	0917	GW	13			Filtered & Preserved 8/1/14 (1050)
DUP-9		0940	GW	13			Filtered & Preserved 8/1/14 (1053)
Camp Blank -9		1010	DI	3			
CB-4		1010	DI	3			
Trip Blank				3			
Stream Cleanups Site MW-4	V	1115	GW	13			Filtered & Preserved 8/1/14 (1160)
Relinquished by:	Date:	Time:	Received by:			Date:	Time:
Jeff Shiman	7/31/14	1226	Hildegard Becker			8/1/14	0845
Relinquished by:	Date:	Time:	Received by:			Date:	Time:

FED EX: 7900 3334 7750

Investigation Work Plan

Cheyenne Airport Addition • Cheyenne, Wyoming
 July 11, 2014 • Terracon Project No. 20149141



2.6 Analytical Testing

The contaminants of concern (COCs) include VOCs. The analytical testing requirements for the collected soil, groundwater and vapor samples are summarized in the table below:

Analytical Testing Requirements

Analyte	Laboratory Method	Existing	Temporary		New		Soil Vapor Points	
		MWs	MWs	GW	Soil	GW		Vapor
List of 8260 VOCs (see table below)	EPA 8260	STAT	Rush	Rush	STAT	STAT		
TPH-GRO and DRO	EPA 8015	STAT			STAT	STAT		
RCRA 8 Metals	EPA 6010	STAT			STAT	STAT		
Fe ⁺² /Fe ⁺³	Standard Method 3500 and EPA Method 6010					STAT		
SO ₄ /SO ₃	EPA Method 300 and Standard Method 4500					STAT		
NO ₃ /NO ₂	EPA Method 300					STAT		
Total Organic Carbon	EPA Method 9060					STAT		
Methane, Ethane, Ethene	RSK 175					STAT		
Select List of VOCs	TO 15						STAT	

Notes:

1. GW = groundwater
2. MW = monitoring well
3. Rush = 24-hour turn-around time for sample analysis from mobile laboratory.
4. STAT = standard turn-around time for sample analysis from fixed-based laboratory.
5. Select list of VOCs includes only those VOC constituents that are reported above laboratory detection limits in the collected soil and groundwater samples.

Investigation Work Plan

Former Cheyenne Steam Laundry and Dry Cleaner • Cheyenne, WY
 July 11, 2014 • Terracon Project No. 24149141



Analytical Testing Requirements

Analyte	Laboratory Method	Existing	Temporary		New		Soil Vapor Points
		MWs	MWs	GW	Soil	GW	
List of 8260 VOCs (see table below)	EPA 8260	STAT	Rush	Rush	STAT	STAT	
TPH-GRO and DRO	EPA 8015	STAT			STAT	STAT	
Fe ⁺² /Fe ⁺³	Standard Method 3500 and EPA Method 6010					STAT	
SO ₄ /SO ₃	EPA Method 300 and Standard Method 4500					STAT	
NO ₃ /NO ₂	EPA Method 300					STAT	
Total Organic Carbon	EPA Method 9060					STAT	
Methane, Ethane, Ethene	RSK 175					STAT	
Select List of VOCs	TO 15						STAT

Notes:

1. GW = groundwater
2. MW = monitoring well
3. Rush = 24-hour turn-around time for sample analysis from mobile laboratory.
4. STAT = standard turn-around time for sample analysis from fixed-based laboratory.
5. Select list of VOCs includes only those VOC constituents that are reported above laboratory detection limits in the collected soil and groundwater samples.



ChemSolutions

7388 S. Revere Parkway #806
Centennial, CO 80112
303.771.5570

September 5, 2014

Clay Muirhead
Terracon
1505 Old Happy Jack Road
Cheyenne, WY 82001

RE: TER043-Airport

Dear Clay,

Enclosed please find the analytical results for the Project #24149141 Airport soil and water samples collected on 8/25/14.

Tables 1-9 contain the analytical results for the samples. The quality control samples are summarized in Tables 10-16.

Thank you for the opportunity to work on this project. Please call if you have any questions. The invoice will be sent separately.

Sincerely,

John Graves
Laboratory Director
ChemSolutions LLC

9/5/2014

ChemSolutions LLC

Table 1

Sample Results

Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

Date Sampled: 8/25/14

Date Received: 8/26/14

<u>ANALYTE</u>	<u>AP-S1</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/5/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	108	8260C
1,2-Dichloroethane-D4	110	8260C
Toluene-D8	101	8260C
Bromofluorobenzene	100	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 2

Sample Results
Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

Date Sampled: 8/25/14

Date Received: 8/26/14

<u>ANALYTE</u>	<u>AP-S2</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/5/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	110	8260C
1,2-Dichloroethane-D4	113	8260C
Toluene-D8	103	8260C
Bromofluorobenzene	98.7	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 3

Sample Results
Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

Date Sampled: 8/25/14

Date Received: 8/26/14

<u>ANALYTE</u>	<u>AP-S3</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/5/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	110	8260C
1,2-Dichloroethane-D4	110	8260C
Toluene-D8	99.7	8260C
Bromofluorobenzene	101	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 4
Sample Results
Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

Date Sampled: 8/25/14

Date Received: 8/26/14

<u>ANALYTE</u>	<u>AP-S4</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/5/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	112	8260C
1,2-Dichloroethane-D4	111	8260C
Toluene-D8	102	8260C
Bromofluorobenzene	99.6	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 5
Sample Results
Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

Date Sampled: 8/25/14

Date Received: 8/26/14

<u>ANALYTE</u>	<u>AP-S5</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/5/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	111	8260C
1,2-Dichloroethane-D4	115	8260C
Toluene-D8	102	8260C
Bromofluorobenzene	101	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 6
Sample Results
Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

Date Sampled: 8/25/14

Date Received: 8/26/14

<u>ANALYTE</u>	<u>AP-S6</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/5/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	107	8260C
1,2-Dichloroethane-D4	110	8260C
Toluene-D8	102	8260C
Bromofluorobenzene	99.5	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 7

Sample Results
Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

Date Sampled: 8/25/14

Date Received: 8/26/14

<u>ANALYTE</u>	<u>AP-S7</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/5/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	108	8260C
1,2-Dichloroethane-D4	109	8260C
Toluene-D8	101	8260C
Bromofluorobenzene	96.8	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 8

Sample Results

Project ID: TER043

Client Project ID: 24149141 Airport
Sample Matrix: Water

Date Sampled: 8/25/14
Date Received: 8/26/14

<u>ANALYTE</u>	<u>AP-W1</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Methylene Chloride	ND	5	ug/L	9/2/2014	8260C
Tetrachloroethene	ND	2	ug/L	9/2/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	116	8260C
1,2-Dichloroethane-D4	116	8260C
Toluene-D8	101	8260C
Bromofluorobenzene	99.0	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 9

Sample Results
Project ID: TER043

Client Project ID: 24149141 Airport
Sample Matrix: Water

Date Sampled: NA
Date Received: 8/26/14

<u>ANALYTE</u>	<u>Trip Blank</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Methylene Chloride	ND	5	ug/L	9/2/2014	8260C
Tetrachloroethene	ND	2	ug/L	9/2/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	115	8260C
1,2-Dichloroethane-D4	116	8260C
Toluene-D8	102	8260C
Bromofluorobenzene	97.5	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 10

Method Blank Results

Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

<u>ANALYTE</u>	<u>Blank</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/4/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	101	8260C
1,2-Dichloroethane-D4	102	8260C
Toluene-D8	99.0	8260C
Bromofluorobenzene	99.4	8260C

ND=Not Detected

9/5/2014

ChemSolutions LLC

Table 11

Method Blank Results

Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Soil

Dry Weight Basis

<u>ANALYTE</u>	<u>Blank</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Tetrachloroethene	ND	2	ug/Kg	9/5/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	105	8260C
1,2-Dichloroethane-D4	104	8260C
Toluene-D8	99.1	8260C
Bromofluorobenzene	99.4	8260C

ND=Not Detected

ChemSolutions LLC
Table 12
Matrix Spike Results
Project ID: TER043

Client Project ID: 24149141 Airport
 Sample Matrix: Soil

Date Sampled: NA
 Date Received: NA

EPA Method 8260C

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	<u>RPD</u>	<u>UNITS</u>
Tetrachloroethene	36.7	73.4	35.0	70.0	4.74	ug/Kg

Date Analyzed: 9/5/14

Surrogate Recoveries

Dibromofluoromethane	52.0	104	51.4	103	NA	ug/Kg
1,2-Dichloroethane-D4	52.9	106	52.6	105	NA	ug/Kg
Toluene-D8	50.3	101	50.3	101	NA	ug/Kg
Bromofluorobenzene	51.2	102	51.9	104	NA	ug/Kg

RPD = Relative Percent Difference, NA = Not Applicable, Not Analyzed

9/5/2014

ChemSolutions LLC

Table 13
LCS Spike Results
Project ID: TER043

Client Project ID: 24149141 Airport
Sample Matrix: Soil

EPA Method 8260C

<u>ANALYTE</u>	<u>LCS SPIKE</u>	Date Analyzed: 9/4/14	<u>UNITS</u>
Tetrachloroethene	40.5	% RECOVERY	ug/Kg

Surrogate Recoveries

Dibromofluoromethane	52.7	105	ug/Kg
1,2-Dichloroethane-D4	53.9	108	ug/Kg
Toluene-D8	50.7	101	ug/Kg
Bromofluorobenzene	51.7	103	ug/Kg

LCS = Laboratory Control Sample

9/5/2014

ChemSolutions LLC

Table 14

Method Blank Results

Project ID: TER043

Client Project ID: 24149141 Airport

Sample Matrix: Water

<u>ANALYTE</u>	<u>Blank</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>EPA Method</u>
Methylene Chloride	ND	5	ug/L	9/2/2014	8260C
Tetrachloroethene	ND	2	ug/L	9/2/2014	8260C

<u>Surrogate Recoveries</u>	<u>% Recovery</u>	<u>Method</u>
Dibromofluoromethane	103	8260C
1,2-Dichloroethane-D4	105	8260C
Toluene-D8	102	8260C
Bromofluorobenzene	101	8260C

ND=Not Detected

ChemSolutions LLC
 Table 15
 Matrix Spike Results
 Project ID: TER043

Client Project ID: 24149141 Airport
 Sample Matrix: Water

Date Sampled: 8/25/14
 Date Received: 8/26/14

EPA Method 8260C

<u>ANALYTE</u>	<u>MATRIX SPIKE</u>	<u>% RECOVERY</u>	<u>MATRIX SPIKE DUP</u>	<u>% RECOVERY</u>	<u>RPD</u>	<u>UNITS</u>
Methylene Chloride	59.2	118	58.7	117	0.85	ug/L
Tetrachloroethene	52.5	105	52.0	104	0.96	ug/L

Surrogate Recoveries

Dibromofluoromethane	56.3	113	52.4	105	NA	ug/L
1,2-Dichloroethane-D4	55.0	110	53.5	107	NA	ug/L
Toluene-D8	51.1	102	50.8	102	NA	ug/L
Bromofluorobenzene	51.3	103	50.1	100	NA	ug/L

RPD = Relative Percent Difference, NA = Not Applicable, Not Analyzed

9/5/2014

ChemSolutions LLC

Table 16
LCS Spike Results
Project ID: TER043

Client Project ID: 24149141 Airport
Sample Matrix: Water

EPA Method 8260C

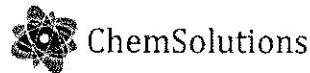
<u>ANALYTE</u>	<u>LCS SPIKE</u>	<u>% RECOVERY</u>	<u>UNITS</u>
Methylene Chloride	58.5	117	ug/L
Tetrachloroethene	51.2	102	ug/L

Surrogate Recoveries

Dibromofluoromethane	51.2	102	ug/L
1,2-Dichloroethane-D4	51.4	103	ug/L
Toluene-D8	51.5	103	ug/L
Bromofluorobenzene	50.8	102	ug/L

LCS = Laboratory Control Sample

End of Report



Chain of Custody

7388 S. Revere Pkwy, #806
 Centennial, CO 80112
 Phone: 303-771-5570
 Fax: 303-771-5574
 Email: lisa@chemmobile.com

Client Name & Address: DEQ		Client Project Name & Location: Terraceon 1505 Old Happy Jack Rd. Cheyenne, WY 82001		ChemSolutions Project #: TER043									
Contact:	Sampler: Jeff Shipman		Location Received: <input checked="" type="checkbox"/> Base <input type="checkbox"/> On-site <input type="checkbox"/> Other _____										
Phone #:	Client Project Number: 24149144		Custody Seals: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No										
E-mail:	Invoice to: Clay Mischke		Temperature in °C <u>1</u>										
				Condition: <input checked="" type="checkbox"/> Samples Intact <input type="checkbox"/> See Remarks									
				Shipping Info. FedEx # 790041519514									
Sample ID	Date Sampled	Time Sampled	Grab or Comp	Matrix	# of Containers	Requested Analysis/Preservative						Remarks	
						PCP	PCV	PCB	PCD	PCF	PCG		
AP-51	8/25/14	0945	C	S	1	X							
AP-52		0945	I	S	1	X							
AP-53		0945	I	S	1	X							
AP-54		0945	I	S	1	X							
AP-55		0945	I	S	1	X							
AP-56		0945	I	S	1	X							
AP-57		0945	I	S	1	X							
AP-W2		1010	V	GW	3	X	X						
Trip Blank			V		2	X	X						
Relinquished by:	Date:	Time:	Received by:						Date:	Time:			
Jeff Shipman	8/25/14	1335	Lindsey Boily						8/26/14	1015			
Relinquished by:	Date:	Time:	Received by:						Date:	Time:			

Quality Control Summary SDG: L713500

For: Terracon - Cheyenne
Project: Airport & Steam Cleaners
August 12, 2014

Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

VOCs in Air by Method TO-15

Laboratory Control Sample

Samples L713500-01, -02, -03, -04, -05, and -06 were analyzed in analytical batch WG735732. The laboratory control sample associated with these samples had all target analytes within method limits except for Benzyl Chloride. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Sample L713500-01 was analyzed in analytical batch WG736022. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Samples L713500-02, -04, and -05 were analyzed in analytical batch WG736090. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Matrix Spike/Matrix Spike Duplicate

Precision for batch WG735732 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Precision for batch WG736022 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Precision for batch WG736090 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Nancy F. McLain
ESC Representative
ESC Lab Sciences



12065 Lebanon Rd.
Mt. Juliet, TN 37122
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

Report Summary

Friday August 08, 2014

Report Number: L713500

Samples Received: 08/02/14

Client Project: 24149141

Description: Airport & Steam Cleaners

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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Est. 1970

REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1252
Collected By : Jeff Shipman
Collection Date : 07/30/14 11:53

ESC Sample # : L713500-01

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	31.2	74.0	180	430	TO-15	08/07/14	25
Allyl chloride	107-05-1	76.53	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzene	71-43-2	78.1	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzyl Chloride	100-44-7	127	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Bromodichloromethane	75-27-4	164	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Bromoform	75-25-2	253	1.20	12.0	< 1.2	< 12.	TO-15	08/06/14	2
Bromomethane	74-83-9	94.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,3-Butadiene	106-99-0	54.1	4.00	8.90	< 4.0	< 8.9	TO-15	08/06/14	2
Carbon disulfide	75-15-0	76.1	0.400	1.20	0.75	2.3	TO-15	08/06/14	2
Carbon tetrachloride	56-23-5	154	0.400	2.50	< 0.40	< 2.5	TO-15	08/06/14	2
Chlorobenzene	108-90-7	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
Chloroethane	75-00-3	64.5	0.400	1.10	0.44	1.2	TO-15	08/06/14	2
Chloroform	67-66-3	119	0.400	1.90	1.5	7.3	TO-15	08/06/14	2
Chloromethane	74-87-3	50.5	0.400	0.830	4.3	8.9	TO-15	08/06/14	2
2-Chlorotoluene	95-49-8	126	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Cyclohexane	110-82-7	84.2	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Dibromochloromethane	124-48-1	208	0.400	3.40	< 0.40	< 3.4	TO-15	08/06/14	2
1,2-Dibromoethane	106-93-4	188	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,2-Dichloroethane	107-06-2	99	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethane	75-34-3	98	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethene	75-35-4	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
cis-1,2-Dichloroethene	156-59-2	96.9	0.400	1.60	4.7	19.	TO-15	08/06/14	2
trans-1,2-Dichloroethene	156-60-5	96.9	0.400	1.60	0.51	2.0	TO-15	08/06/14	2
1,2-Dichloropropane	78-87-5	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
1,4-Dioxane	123-91-1	88.1	0.400	1.40	7.3	26.	TO-15	08/06/14	2
Ethanol	64-17-5	46.1	1.26	2.40	34.	64.	TO-15	08/06/14	2
Ethylbenzene	100-41-4	106	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
4-Ethyltoluene	622-96-8	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
Trichlorofluoromethane	75-69-4	137.4	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Dichlorodifluoromethane	75-71-8	120.92	0.400	2.00	0.42	2.1	TO-15	08/06/14	2
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	< 0.40	< 2.8	TO-15	08/06/14	2
Heptane	142-82-5	100	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.0	< 1.3	< 13.	TO-15	08/06/14	2
n-Hexane	110-54-3	86.2	0.400	1.40	0.46	1.6	TO-15	08/06/14	2
Isopropylbenzene	98-82-8	120.2	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
Methylene Chloride	75-09-2	84.9	0.400	1.40	1.2	4.2	TO-15	08/06/14	2
Methyl Butyl Ketone	591-78-6	100	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

Units are based on (STP) - Standard Temperature and Pressure

The reported analytical results relate only to the sample submitted.

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1252
Collected By : Jeff Shipman
Collection Date : 07/30/14 11:53

ESC Sample # : L713500-01

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
2-Butanone (MEK)	78-93-3	72.1	2.50	7.40	12.	35.	TO-15	08/06/14	2
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2
Methyl methacrylate	80-62-6	100.12	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
MTBE	1634-04-4	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Naphthalene	91-20-3	128	1.26	6.60	< 1.3	< 6.6	TO-15	08/06/14	2
2-Propanol	67-63-0	60.1	2.50	6.10	11.	27.	TO-15	08/06/14	2
Propene	115-07-1	42.1	0.800	1.40	< 0.80	< 1.4	TO-15	08/06/14	2
Styrene	100-42-5	104	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Tetrachloroethylene	127-18-4	166	5.00	34.0	270	1800	TO-15	08/07/14	25
Tetrahydrofuran	109-99-9	72.1	0.400	1.20	11.	32.	TO-15	08/06/14	2
Toluene	108-88-3	92.1	0.400	1.50	2.6	9.8	TO-15	08/06/14	2
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.30	< 1.3	< 9.3	TO-15	08/06/14	2
1,1,1-Trichloroethane	71-55-6	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
1,1,2-Trichloroethane	79-00-5	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Trichloroethylene	79-01-6	131	0.400	2.10	13.	70.	TO-15	08/06/14	2
1,2,4-Trimethylbenzene	95-63-6	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
1,3,5-Trimethylbenzene	108-67-8	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.90	< 0.40	< 1.9	TO-15	08/06/14	2
Vinyl chloride	75-01-4	62.5	0.400	1.00	< 0.40	< 1.0	TO-15	08/06/14	2
Vinyl Bromide	593-60-2	106.95	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
Vinyl acetate	108-05-4	86.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
m&p-Xylene	1330-20-7	106	0.800	3.50	< 0.80	< 3.5	TO-15	08/06/14	2
o-Xylene	95-47-6	106	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
1,4-Bromofluorobenzene	460-00-4				104	% Rec.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

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Est. 1970

REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1074
Collected By : Jeff Shipman
Collection Date : 07/30/14 10:12

ESC Sample # : L713500-02

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	2.50	5.90	57.	140	TO-15	08/06/14	2
Allyl chloride	107-05-1	76.53	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzene	71-43-2	78.1	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzyl Chloride	100-44-7	127	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Bromodichloromethane	75-27-4	164	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Bromoform	75-25-2	253	1.20	12.0	< 1.2	< 12.	TO-15	08/06/14	2
Bromomethane	74-83-9	94.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,3-Butadiene	106-99-0	54.1	4.00	8.90	< 4.0	< 8.9	TO-15	08/06/14	2
Carbon disulfide	75-15-0	76.1	0.400	1.20	1.0	3.1	TO-15	08/06/14	2
Carbon tetrachloride	56-23-5	154	0.400	2.50	< 0.40	< 2.5	TO-15	08/06/14	2
Chlorobenzene	108-90-7	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
Chloroethane	75-00-3	64.5	0.400	1.10	< 0.40	< 1.1	TO-15	08/06/14	2
Chloroform	67-66-3	119	0.400	1.90	1.9	9.2	TO-15	08/06/14	2
Chloromethane	74-87-3	50.5	0.400	0.830	0.49	1.0	TO-15	08/06/14	2
2-Chlorotoluene	95-49-8	126	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Cyclohexane	110-82-7	84.2	0.400	1.40	0.50	1.7	TO-15	08/06/14	2
Dibromochloromethane	124-48-1	208	0.400	3.40	< 0.40	< 3.4	TO-15	08/06/14	2
1,2-Dibromoethane	106-93-4	188	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,2-Dichloroethane	107-06-2	99	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethane	75-34-3	98	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethene	75-35-4	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
cis-1,2-Dichloroethene	156-59-2	96.9	0.400	1.60	6.0	24.	TO-15	08/06/14	2
trans-1,2-Dichloroethene	156-60-5	96.9	0.400	1.60	0.58	2.3	TO-15	08/06/14	2
1,2-Dichloropropane	78-87-5	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
1,4-Dioxane	123-91-1	88.1	0.400	1.40	0.66	2.4	TO-15	08/06/14	2
Ethanol	64-17-5	46.1	1.26	2.40	72.	140	TO-15	08/06/14	2
Ethylbenzene	100-41-4	106	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
4-Ethyltoluene	622-96-8	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
Trichlorofluoromethane	75-69-4	137.4	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Dichlorodifluoromethane	75-71-8	120.92	0.400	2.00	0.54	2.7	TO-15	08/06/14	2
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	< 0.40	< 2.8	TO-15	08/06/14	2
Heptane	142-82-5	100	0.400	1.60	0.46	1.9	TO-15	08/06/14	2
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.0	< 1.3	< 13.	TO-15	08/06/14	2
n-Hexane	110-54-3	86.2	0.400	1.40	0.79	2.8	TO-15	08/06/14	2
Isopropylbenzene	98-82-8	120.2	0.400	2.00	1.6	7.9	TO-15	08/06/14	2
Methylene Chloride	75-09-2	84.9	0.400	1.40	1.5	5.2	TO-15	08/06/14	2
Methyl Butyl Ketone	591-78-6	100	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

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REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1074
Collected By : Jeff Shipman
Collection Date : 07/30/14 10:12

ESC Sample # : L713500-02

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
2-Butanone (MEK)	78-93-3	72.1	2.50	7.40	5.9	17.	TO-15	08/06/14	2
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2
Methyl methacrylate	80-62-6	100.12	0.400	1.60	0.61	2.5	TO-15	08/06/14	2
MTBE	1634-04-4	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Naphthalene	91-20-3	128	1.26	6.60	< 1.3	< 6.6	TO-15	08/06/14	2
2-Propanol	67-63-0	60.1	2.50	6.10	61.	150	TO-15	08/06/14	2
Propene	115-07-1	42.1	0.800	1.40	1.5	2.6	TO-15	08/06/14	2
Styrene	100-42-5	104	0.400	1.70	0.81	3.4	TO-15	08/06/14	2
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Tetrachloroethylene	127-18-4	166	5.00	34.0	200	1400	TO-15	08/07/14	25
Tetrahydrofuran	109-99-9	72.1	0.400	1.20	1.0	2.9	TO-15	08/06/14	2
Toluene	108-88-3	92.1	0.400	1.50	3.3	12.	TO-15	08/06/14	2
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.30	< 1.3	< 9.3	TO-15	08/06/14	2
1,1,1-Trichloroethane	71-55-6	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
1,1,2-Trichloroethane	79-00-5	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Trichloroethylene	79-01-6	131	0.400	2.10	9.0	48.	TO-15	08/06/14	2
1,2,4-Trimethylbenzene	95-63-6	120	0.400	2.00	0.94	4.6	TO-15	08/06/14	2
1,3,5-Trimethylbenzene	108-67-8	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.90	< 0.40	< 1.9	TO-15	08/06/14	2
Vinyl chloride	75-01-4	62.5	0.400	1.00	< 0.40	< 1.0	TO-15	08/06/14	2
Vinyl Bromide	593-60-2	106.95	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
Vinyl acetate	108-05-4	86.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
m&p-Xylene	1330-20-7	106	0.800	3.50	0.97	4.2	TO-15	08/06/14	2
o-Xylene	95-47-6	106	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
1,4-Bromofluorobenzene	460-00-4				105	% Rec.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

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REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1286
Collected By : Jeff Shipman
Collection Date : 07/30/14 09:26

ESC Sample # : L713500-03

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	2.50	5.90	58.	140	TO-15	08/06/14	2
Allyl chloride	107-05-1	76.53	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzene	71-43-2	78.1	0.400	1.30	0.42	1.3	TO-15	08/06/14	2
Benzyl Chloride	100-44-7	127	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Bromodichloromethane	75-27-4	164	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Bromoform	75-25-2	253	1.20	12.0	< 1.2	< 12.	TO-15	08/06/14	2
Bromomethane	74-83-9	94.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,3-Butadiene	106-99-0	54.1	4.00	8.90	< 4.0	< 8.9	TO-15	08/06/14	2
Carbon disulfide	75-15-0	76.1	0.400	1.20	3.3	10.	TO-15	08/06/14	2
Carbon tetrachloride	56-23-5	154	0.400	2.50	< 0.40	< 2.5	TO-15	08/06/14	2
Chlorobenzene	108-90-7	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
Chloroethane	75-00-3	64.5	0.400	1.10	< 0.40	< 1.1	TO-15	08/06/14	2
Chloroform	67-66-3	119	0.400	1.90	< 0.40	< 1.9	TO-15	08/06/14	2
Chloromethane	74-87-3	50.5	0.400	0.830	0.95	2.0	TO-15	08/06/14	2
2-Chlorotoluene	95-49-8	126	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Cyclohexane	110-82-7	84.2	0.400	1.40	2.2	7.6	TO-15	08/06/14	2
Dibromochloromethane	124-48-1	208	0.400	3.40	< 0.40	< 3.4	TO-15	08/06/14	2
1,2-Dibromoethane	106-93-4	188	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,2-Dichloroethane	107-06-2	99	0.400	1.60	0.82	3.3	TO-15	08/06/14	2
1,1-Dichloroethane	75-34-3	98	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethene	75-35-4	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
cis-1,2-Dichloroethene	156-59-2	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
trans-1,2-Dichloroethene	156-60-5	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,2-Dichloropropane	78-87-5	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
1,4-Dioxane	123-91-1	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Ethanol	64-17-5	46.1	1.26	2.40	160	300	TO-15	08/06/14	2
Ethylbenzene	100-41-4	106	0.400	1.70	1.3	5.6	TO-15	08/06/14	2
4-Ethyltoluene	622-96-8	120	0.400	2.00	1.2	5.9	TO-15	08/06/14	2
Trichlorofluoromethane	75-69-4	137.4	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Dichlorodifluoromethane	75-71-8	120.92	0.400	2.00	0.62	3.1	TO-15	08/06/14	2
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	< 0.40	< 2.8	TO-15	08/06/14	2
Heptane	142-82-5	100	0.400	1.60	2.7	11.	TO-15	08/06/14	2
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.0	< 1.3	< 13.	TO-15	08/06/14	2
n-Hexane	110-54-3	86.2	0.400	1.40	11.	39.	TO-15	08/06/14	2
Isopropylbenzene	98-82-8	120.2	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
Methylene Chloride	75-09-2	84.9	0.400	1.40	6.4	22.	TO-15	08/06/14	2
Methyl Butyl Ketone	591-78-6	100	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

Units are based on (STP) - Standard Temperature and Pressure

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1286
Collected By : Jeff Shipman
Collection Date : 07/30/14 09:26

ESC Sample # : L713500-03

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
2-Butanone (MEK)	78-93-3	72.1	2.50	7.40	14.	41.	TO-15	08/06/14	2
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	2.50	10.0	5.0	20.	TO-15	08/06/14	2
Methyl methacrylate	80-62-6	100.12	0.400	1.60	0.54	2.2	TO-15	08/06/14	2
MTBE	1634-04-4	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Naphthalene	91-20-3	128	1.26	6.60	< 1.3	< 6.6	TO-15	08/06/14	2
2-Propanol	67-63-0	60.1	2.50	6.10	140	340	TO-15	08/06/14	2
Propene	115-07-1	42.1	0.800	1.40	< 0.80	< 1.4	TO-15	08/06/14	2
Styrene	100-42-5	104	0.400	1.70	1.4	6.0	TO-15	08/06/14	2
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Tetrachloroethylene	127-18-4	166	0.400	2.70	3.7	25.	TO-15	08/06/14	2
Tetrahydrofuran	109-99-9	72.1	0.400	1.20	1.2	3.5	TO-15	08/06/14	2
Toluene	108-88-3	92.1	0.400	1.50	69.	260	TO-15	08/06/14	2
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.30	< 1.3	< 9.3	TO-15	08/06/14	2
1,1,1-Trichloroethane	71-55-6	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
1,1,2-Trichloroethane	79-00-5	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Trichloroethylene	79-01-6	131	0.400	2.10	0.66	3.5	TO-15	08/06/14	2
1,2,4-Trimethylbenzene	95-63-6	120	0.400	2.00	4.5	22.	TO-15	08/06/14	2
1,3,5-Trimethylbenzene	108-67-8	120	0.400	2.00	1.5	7.4	TO-15	08/06/14	2
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.90	< 0.40	< 1.9	TO-15	08/06/14	2
Vinyl chloride	75-01-4	62.5	0.400	1.00	< 0.40	< 1.0	TO-15	08/06/14	2
Vinyl Bromide	593-60-2	106.95	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
Vinyl acetate	108-05-4	86.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
m&p-Xylene	1330-20-7	106	0.800	3.50	3.7	16.	TO-15	08/06/14	2
o-Xylene	95-47-6	106	0.400	1.70	1.5	6.5	TO-15	08/06/14	2
1,4-Bromofluorobenzene	460-00-4				106	% Rec.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 781
Collected By : Jeff Shipman
Collection Date : 08/01/14 11:11

ESC Sample # : L713500-04

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	5.00	12.0	12.	29.	TO-15	08/06/14	4
Allyl chloride	107-05-1	76.53	0.800	2.50	< 0.80	< 2.5	TO-15	08/06/14	4
Benzene	71-43-2	78.1	0.800	2.60	< 0.80	< 2.6	TO-15	08/06/14	4
Benzyl Chloride	100-44-7	127	0.800	4.20	< 0.80	< 4.2	TO-15	08/06/14	4
Bromodichloromethane	75-27-4	164	0.800	5.40	< 0.80	< 5.4	TO-15	08/06/14	4
Bromoform	75-25-2	253	2.40	25.0	< 2.4	< 25.	TO-15	08/06/14	4
Bromomethane	74-83-9	94.9	0.800	3.10	< 0.80	< 3.1	TO-15	08/06/14	4
1,3-Butadiene	106-99-0	54.1	8.00	18.0	< 8.0	< 18.	TO-15	08/06/14	4
Carbon disulfide	75-15-0	76.1	0.800	2.50	< 0.80	< 2.5	TO-15	08/06/14	4
Carbon tetrachloride	56-23-5	154	0.800	5.00	< 0.80	< 5.0	TO-15	08/06/14	4
Chlorobenzene	108-90-7	113	0.800	3.70	< 0.80	< 3.7	TO-15	08/06/14	4
Chloroethane	75-00-3	64.5	0.800	2.10	< 0.80	< 2.1	TO-15	08/06/14	4
Chloroform	67-66-3	119	0.800	3.90	0.85	4.1	TO-15	08/06/14	4
Chloromethane	74-87-3	50.5	0.800	1.70	< 0.80	< 1.7	TO-15	08/06/14	4
2-Chlorotoluene	95-49-8	126	0.800	4.10	< 0.80	< 4.1	TO-15	08/06/14	4
Cyclohexane	110-82-7	84.2	0.800	2.80	< 0.80	< 2.8	TO-15	08/06/14	4
Dibromochloromethane	124-48-1	208	0.800	6.80	< 0.80	< 6.8	TO-15	08/06/14	4
1,2-Dibromoethane	106-93-4	188	0.800	6.20	< 0.80	< 6.2	TO-15	08/06/14	4
1,2-Dichlorobenzene	95-50-1	147	0.800	4.80	< 0.80	< 4.8	TO-15	08/06/14	4
1,3-Dichlorobenzene	541-73-1	147	0.800	4.80	< 0.80	< 4.8	TO-15	08/06/14	4
1,4-Dichlorobenzene	106-46-7	147	0.800	4.80	< 0.80	< 4.8	TO-15	08/06/14	4
1,2-Dichloroethane	107-06-2	99	0.800	3.20	< 0.80	< 3.2	TO-15	08/06/14	4
1,1-Dichloroethane	75-34-3	98	0.800	3.20	< 0.80	< 3.2	TO-15	08/06/14	4
1,1-Dichloroethene	75-35-4	96.9	0.800	3.20	< 0.80	< 3.2	TO-15	08/06/14	4
cis-1,2-Dichloroethene	156-59-2	96.9	0.800	3.20	< 0.80	< 3.2	TO-15	08/06/14	4
trans-1,2-Dichloroethene	156-60-5	96.9	0.800	3.20	< 0.80	< 3.2	TO-15	08/06/14	4
1,2-Dichloropropane	78-87-5	113	0.800	3.70	< 0.80	< 3.7	TO-15	08/06/14	4
cis-1,3-Dichloropropene	10061-01-5	111	0.800	3.60	< 0.80	< 3.6	TO-15	08/06/14	4
trans-1,3-Dichloropropene	10061-02-6	111	0.800	3.60	< 0.80	< 3.6	TO-15	08/06/14	4
1,4-Dioxane	123-91-1	88.1	0.800	2.90	< 0.80	< 2.9	TO-15	08/06/14	4
Ethanol	64-17-5	46.1	2.52	4.80	7.1	13.	TO-15	08/06/14	4
Ethylbenzene	100-41-4	106	0.800	3.50	< 0.80	< 3.5	TO-15	08/06/14	4
4-Ethyltoluene	622-96-8	120	0.800	3.90	< 0.80	< 3.9	TO-15	08/06/14	4
Trichlorofluoromethane	75-69-4	137.4	0.800	4.50	< 0.80	< 4.5	TO-15	08/06/14	4
Dichlorodifluoromethane	75-71-8	120.92	0.800	4.00	6.9	34.	TO-15	08/06/14	4
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.800	6.10	< 0.80	< 6.1	TO-15	08/06/14	4
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.800	5.60	< 0.80	< 5.6	TO-15	08/06/14	4
Heptane	142-82-5	100	0.800	3.30	< 0.80	< 3.3	TO-15	08/06/14	4
Hexachloro-1,3-butadiene	87-68-3	261	2.52	27.0	< 2.5	< 27.	TO-15	08/06/14	4
n-Hexane	110-54-3	86.2	0.800	2.80	< 0.80	< 2.8	TO-15	08/06/14	4
Isopropylbenzene	98-82-8	120.2	0.800	3.90	< 0.80	< 3.9	TO-15	08/06/14	4
Methylene Chloride	75-09-2	84.9	0.800	2.80	0.90	3.1	TO-15	08/06/14	4
Methyl Butyl Ketone	591-78-6	100	5.00	20.0	< 5.0	< 20.	TO-15	08/06/14	4

RDL1 = ppbv , RDL2 = ug/m3

Note:

Units are based on (STP) - Standard Temperature and Pressure

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 781
Collected By : Jeff Shipman
Collection Date : 08/01/14 11:11

ESC Sample # : L713500-04

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
2-Butanone (MEK)	78-93-3	72.1	5.00	15.0	< 5.0	< 15.	TO-15	08/06/14	4
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	5.00	20.0	< 5.0	< 20.	TO-15	08/06/14	4
Methyl methacrylate	80-62-6	100.12	0.800	3.30	< 0.80	< 3.3	TO-15	08/06/14	4
MTBE	1634-04-4	88.1	0.800	2.90	< 0.80	< 2.9	TO-15	08/06/14	4
Naphthalene	91-20-3	128	2.52	13.0	< 2.5	< 13.	TO-15	08/06/14	4
2-Propanol	67-63-0	60.1	5.00	12.0	< 5.0	< 12.	TO-15	08/06/14	4
Propene	115-07-1	42.1	1.60	2.80	< 1.6	< 2.8	TO-15	08/06/14	4
Styrene	100-42-5	104	0.800	3.40	1.3	5.5	TO-15	08/06/14	4
1,1,2,2-Tetrachloroethane	79-34-5	168	0.800	5.50	< 0.80	< 5.5	TO-15	08/06/14	4
Tetrachloroethylene	127-18-4	166	32.0	220.	680	4600	TO-15	08/07/14	160
Tetrahydrofuran	109-99-9	72.1	0.800	2.40	< 0.80	< 2.4	TO-15	08/06/14	4
Toluene	108-88-3	92.1	0.800	3.00	1.0	3.8	TO-15	08/06/14	4
1,2,4-Trichlorobenzene	120-82-1	181	2.52	19.0	< 2.5	< 19.	TO-15	08/06/14	4
1,1,1-Trichloroethane	71-55-6	133	0.800	4.40	1.0	5.4	TO-15	08/06/14	4
1,1,2-Trichloroethane	79-00-5	133	0.800	4.40	< 0.80	< 4.4	TO-15	08/06/14	4
Trichloroethylene	79-01-6	131	0.800	4.30	6.7	36.	TO-15	08/06/14	4
1,2,4-Trimethylbenzene	95-63-6	120	0.800	3.90	< 0.80	< 3.9	TO-15	08/06/14	4
1,3,5-Trimethylbenzene	108-67-8	120	0.800	3.90	< 0.80	< 3.9	TO-15	08/06/14	4
2,2,4-Trimethylpentane	540-84-1	114.22	0.800	3.70	< 0.80	< 3.7	TO-15	08/06/14	4
Vinyl chloride	75-01-4	62.5	0.800	2.00	< 0.80	< 2.0	TO-15	08/06/14	4
Vinyl Bromide	593-60-2	106.95	0.800	3.50	< 0.80	< 3.5	TO-15	08/06/14	4
Vinyl acetate	108-05-4	86.1	0.800	2.80	< 0.80	< 2.8	TO-15	08/06/14	4
m&p-Xylene	1330-20-7	106	1.60	6.90	< 1.6	< 6.9	TO-15	08/06/14	4
o-Xylene	95-47-6	106	0.800	3.50	< 0.80	< 3.5	TO-15	08/06/14	4
1,4-Bromofluorobenzene	460-00-4				98.8	% Rec.	TO-15	08/06/14	4

RDL1 = ppbv , RDL2 = ug/m3

Note:

Units are based on (STP) - Standard Temperature and Pressure

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1501
Collected By : Jeff Shipman
Collection Date : 08/01/14 08:44

ESC Sample # : L713500-05

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	2.50	5.90	24.	57.	TO-15	08/06/14	2
Allyl chloride	107-05-1	76.53	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzene	71-43-2	78.1	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzyl Chloride	100-44-7	127	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Bromodichloromethane	75-27-4	164	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Bromoform	75-25-2	253	1.20	12.0	< 1.2	< 12.	TO-15	08/06/14	2
Bromomethane	74-83-9	94.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,3-Butadiene	106-99-0	54.1	4.00	8.90	< 4.0	< 8.9	TO-15	08/06/14	2
Carbon disulfide	75-15-0	76.1	0.400	1.20	< 0.40	< 1.2	TO-15	08/06/14	2
Carbon tetrachloride	56-23-5	154	0.400	2.50	< 0.40	< 2.5	TO-15	08/06/14	2
Chlorobenzene	108-90-7	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
Chloroethane	75-00-3	64.5	0.400	1.10	< 0.40	< 1.1	TO-15	08/06/14	2
Chloroform	67-66-3	119	0.400	1.90	4.8	23.	TO-15	08/06/14	2
Chloromethane	74-87-3	50.5	0.400	0.830	< 0.40	< 0.83	TO-15	08/06/14	2
2-Chlorotoluene	95-49-8	126	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Cyclohexane	110-82-7	84.2	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Dibromochloromethane	124-48-1	208	0.400	3.40	< 0.40	< 3.4	TO-15	08/06/14	2
1,2-Dibromoethane	106-93-4	188	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,2-Dichloroethane	107-06-2	99	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethane	75-34-3	98	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethene	75-35-4	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
cis-1,2-Dichloroethene	156-59-2	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
trans-1,2-Dichloroethene	156-60-5	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,2-Dichloropropane	78-87-5	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
1,4-Dioxane	123-91-1	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Ethanol	64-17-5	46.1	1.26	2.40	10.	19.	TO-15	08/06/14	2
Ethylbenzene	100-41-4	106	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
4-Ethyltoluene	622-96-8	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
Trichlorofluoromethane	75-69-4	137.4	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Dichlorodifluoromethane	75-71-8	120.92	0.400	2.00	0.42	2.1	TO-15	08/06/14	2
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	< 0.40	< 2.8	TO-15	08/06/14	2
Heptane	142-82-5	100	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.0	< 1.3	< 13.	TO-15	08/06/14	2
n-Hexane	110-54-3	86.2	0.400	1.40	3.6	13.	TO-15	08/06/14	2
Isopropylbenzene	98-82-8	120.2	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
Methylene Chloride	75-09-2	84.9	0.400	1.40	3.1	11.	TO-15	08/06/14	2
Methyl Butyl Ketone	591-78-6	100	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

Units are based on (STP) - Standard Temperature and Pressure

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1501
Collected By : Jeff Shipman
Collection Date : 08/01/14 08:44

ESC Sample # : L713500-05

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
2-Butanone (MEK)	78-93-3	72.1	2.50	7.40	3.1	9.1	TO-15	08/06/14	2
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2
Methyl methacrylate	80-62-6	100.12	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
MTBE	1634-04-4	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Naphthalene	91-20-3	128	1.26	6.60	< 1.3	< 6.6	TO-15	08/06/14	2
2-Propanol	67-63-0	60.1	2.50	6.10	< 2.5	< 6.1	TO-15	08/06/14	2
Propene	115-07-1	42.1	0.800	1.40	< 0.80	< 1.4	TO-15	08/06/14	2
Styrene	100-42-5	104	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Tetrachloroethylene	127-18-4	166	4.00	27.00	120	810	TO-15	08/07/14	20
Tetrahydrofuran	109-99-9	72.1	0.400	1.20	< 0.40	< 1.2	TO-15	08/06/14	2
Toluene	108-88-3	92.1	0.400	1.50	0.69	2.6	TO-15	08/06/14	2
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.30	< 1.3	< 9.3	TO-15	08/06/14	2
1,1,1-Trichloroethane	71-55-6	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
1,1,2-Trichloroethane	79-00-5	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Trichloroethylene	79-01-6	131	0.400	2.10	19.	100	TO-15	08/06/14	2
1,2,4-Trimethylbenzene	95-63-6	120	0.400	2.00	0.50	2.5	TO-15	08/06/14	2
1,3,5-Trimethylbenzene	108-67-8	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.90	< 0.40	< 1.9	TO-15	08/06/14	2
Vinyl chloride	75-01-4	62.5	0.400	1.00	< 0.40	< 1.0	TO-15	08/06/14	2
Vinyl Bromide	593-60-2	106.95	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
Vinyl acetate	108-05-4	86.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
m&p-Xylene	1330-20-7	106	0.800	3.50	< 0.80	< 3.5	TO-15	08/06/14	2
o-Xylene	95-47-6	106	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
1,4-Bromofluorobenzene	460-00-4				102	% Rec.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

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REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1461
Collected By : Jeff Shipman
Collection Date : 08/01/14 10:11

ESC Sample # : L713500-06

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	2.50	5.90	23.	55.	TO-15	08/06/14	2
Allyl chloride	107-05-1	76.53	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzene	71-43-2	78.1	0.400	1.30	< 0.40	< 1.3	TO-15	08/06/14	2
Benzyl Chloride	100-44-7	127	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Bromodichloromethane	75-27-4	164	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Bromoform	75-25-2	253	1.20	12.0	< 1.2	< 12.	TO-15	08/06/14	2
Bromomethane	74-83-9	94.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,3-Butadiene	106-99-0	54.1	4.00	8.90	< 4.0	< 8.9	TO-15	08/06/14	2
Carbon disulfide	75-15-0	76.1	0.400	1.20	0.60	1.9	TO-15	08/06/14	2
Carbon tetrachloride	56-23-5	154	0.400	2.50	< 0.40	< 2.5	TO-15	08/06/14	2
Chlorobenzene	108-90-7	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
Chloroethane	75-00-3	64.5	0.400	1.10	< 0.40	< 1.1	TO-15	08/06/14	2
Chloroform	67-66-3	119	0.400	1.90	0.49	2.4	TO-15	08/06/14	2
Chloromethane	74-87-3	50.5	0.400	0.830	< 0.40	< 0.83	TO-15	08/06/14	2
2-Chlorotoluene	95-49-8	126	0.400	2.10	< 0.40	< 2.1	TO-15	08/06/14	2
Cyclohexane	110-82-7	84.2	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Dibromochloromethane	124-48-1	208	0.400	3.40	< 0.40	< 3.4	TO-15	08/06/14	2
1,2-Dibromoethane	106-93-4	188	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	< 0.40	< 2.4	TO-15	08/06/14	2
1,2-Dichloroethane	107-06-2	99	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethane	75-34-3	98	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,1-Dichloroethene	75-35-4	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
cis-1,2-Dichloroethene	156-59-2	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
trans-1,2-Dichloroethene	156-60-5	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
1,2-Dichloropropane	78-87-5	113	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.80	< 0.40	< 1.8	TO-15	08/06/14	2
1,4-Dioxane	123-91-1	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Ethanol	64-17-5	46.1	1.26	2.40	11.	21.	TO-15	08/06/14	2
Ethylbenzene	100-41-4	106	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
4-Ethyltoluene	622-96-8	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
Trichlorofluoromethane	75-69-4	137.4	0.400	2.20	1.2	6.7	TO-15	08/06/14	2
Dichlorodifluoromethane	75-71-8	120.92	0.400	2.00	1.3	6.4	TO-15	08/06/14	2
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.400	3.10	< 0.40	< 3.1	TO-15	08/06/14	2
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	< 0.40	< 2.8	TO-15	08/06/14	2
Heptane	142-82-5	100	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.0	< 1.3	< 13.	TO-15	08/06/14	2
n-Hexane	110-54-3	86.2	0.400	1.40	4.2	15.	TO-15	08/06/14	2
Isopropylbenzene	98-82-8	120.2	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
Methylene Chloride	75-09-2	84.9	0.400	1.40	3.9	14.	TO-15	08/06/14	2
Methyl Butyl Ketone	591-78-6	100	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

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REPORT OF ANALYSIS

Jeff Shipman
Terracon - Cheyenne
1505 Old Happy Jack Road
Cheyenne, WY 82001

August 08, 2014

Date Received : August 02, 2014
Description : Airport & Steam Cleaners
Sample ID : 1461
Collected By : Jeff Shipman
Collection Date : 08/01/14 10:11

ESC Sample # : L713500-06

Site ID :

Project # : 24149141

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
2-Butanone (MEK)	78-93-3	72.1	2.50	7.40	< 2.5	< 7.4	TO-15	08/06/14	2
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	2.50	10.0	< 2.5	< 10.	TO-15	08/06/14	2
Methyl methacrylate	80-62-6	100.12	0.400	1.60	< 0.40	< 1.6	TO-15	08/06/14	2
MTBE	1634-04-4	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
Naphthalene	91-20-3	128	1.26	6.60	< 1.3	< 6.6	TO-15	08/06/14	2
2-Propanol	67-63-0	60.1	2.50	6.10	< 2.5	< 6.1	TO-15	08/06/14	2
Propene	115-07-1	42.1	0.800	1.40	< 0.80	< 1.4	TO-15	08/06/14	2
Styrene	100-42-5	104	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.70	< 0.40	< 2.7	TO-15	08/06/14	2
Tetrachloroethylene	127-18-4	166	0.400	2.70	21.	140	TO-15	08/06/14	2
Tetrahydrofuran	109-99-9	72.1	0.400	1.20	< 0.40	< 1.2	TO-15	08/06/14	2
Toluene	108-88-3	92.1	0.400	1.50	0.86	3.2	TO-15	08/06/14	2
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.30	< 1.3	< 9.3	TO-15	08/06/14	2
1,1,1-Trichloroethane	71-55-6	133	0.400	2.20	1.6	8.7	TO-15	08/06/14	2
1,1,2-Trichloroethane	79-00-5	133	0.400	2.20	< 0.40	< 2.2	TO-15	08/06/14	2
Trichloroethylene	79-01-6	131	0.400	2.10	7.2	39.	TO-15	08/06/14	2
1,2,4-Trimethylbenzene	95-63-6	120	0.400	2.00	1.0	4.9	TO-15	08/06/14	2
1,3,5-Trimethylbenzene	108-67-8	120	0.400	2.00	< 0.40	< 2.0	TO-15	08/06/14	2
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.90	< 0.40	< 1.9	TO-15	08/06/14	2
Vinyl chloride	75-01-4	62.5	0.400	1.00	< 0.40	< 1.0	TO-15	08/06/14	2
Vinyl Bromide	593-60-2	106.95	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
Vinyl acetate	108-05-4	86.1	0.400	1.40	< 0.40	< 1.4	TO-15	08/06/14	2
m&p-Xylene	1330-20-7	106	0.800	3.50	< 0.80	< 3.5	TO-15	08/06/14	2
o-Xylene	95-47-6	106	0.400	1.70	< 0.40	< 1.7	TO-15	08/06/14	2
1,4-Bromofluorobenzene	460-00-4				103	% Rec.	TO-15	08/06/14	2

RDL1 = ppbv , RDL2 = ug/m3

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L713500-01	WG735732	SAMP	Benzyl Chloride	R2972737	J4
L713500-02	WG735732	SAMP	Benzyl Chloride	R2972737	J4
L713500-03	WG735732	SAMP	Benzyl Chloride	R2972737	J4
	WG735732	SAMP	Ethanol	R2972737	E
L713500-04	WG735732	SAMP	2-Propanol	R2972737	E
L713500-05	WG735732	SAMP	Benzyl Chloride	R2972737	J4
L713500-06	WG735732	SAMP	Benzyl Chloride	R2972737	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
E	GTL (EPA) - Greater than upper calibration limit: Actual value is known to be greater than the upper calibration range.
J4	The associated batch QC was outside the established quality control range for accuracy.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG735732**
 Analysis Date: 8/6/2014 5:56:00 PM Analyst: 564
 Instrument ID: AIRMS2
 Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1-Trichloroethane	71-55-6	< 0.200	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.200	
1,1,2-Trichloroethane	79-00-5	< 0.200	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.200	
1,1-Dichloroethane	75-34-3	< 0.200	
1,1-Dichloroethene	75-35-4	< 0.200	
1,2,4-Trichlorobenzene	120-82-1	< 0.630	
1,2,4-Trimethylbenzene	95-63-6	< 0.200	
1,2-Dibromoethane	106-93-4	< 0.200	
1,2-Dichlorobenzene	95-50-1	< 0.200	
1,2-Dichloroethane	107-06-2	< 0.200	
1,2-Dichloropropane	78-87-5	< 0.200	
1,2-Dichlorotetrafluoroethane	76-14-2	< 0.200	
1,3,5-Trimethylbenzene	108-67-8	< 0.200	
1,3-Butadiene	106-99-0	< 2.00	
1,3-Dichlorobenzene	541-73-1	< 0.200	
1,4-Dichlorobenzene	106-46-7	< 0.200	
1,4-Dioxane	123-91-1	< 0.200	
2,2,4-Trimethylpentane	540-84-1	< 0.200	
2-Butanone (MEK)	78-93-3	< 1.25	
2-Chlorotoluene	95-49-8	< 0.200	
2-Propanol	67-63-0	< 1.25	
4-Ethyltoluene	622-96-8	< 0.200	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 1.25	
Acetone	67-64-1	< 1.25	
Allyl Chloride	107-05-1	< 0.200	
Benzene	71-43-2	< 0.200	
Benzyl Chloride	100-44-7	< 0.200	
Bromodichloromethane	75-27-4	< 0.200	
Bromoform	75-25-2	< 0.600	
Bromomethane	74-83-9	< 0.200	
Carbon disulfide	75-15-0	< 0.200	
Carbon tetrachloride	56-23-5	< 0.200	
Chlorobenzene	108-90-7	< 0.200	
Dibromochloromethane	124-48-1	< 0.200	
Chloroethane	75-00-3	< 0.200	
Chloroform	67-66-3	< 0.200	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG735732**
 Analysis Date: 8/6/2014 5:56:00 PM Analyst: 564
 Instrument ID: AIRMS2
 Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Method Blank

Analyte	CAS	RDL	Qualifier
Chloromethane	74-87-3	< 0.200	
cis-1,2-Dichloroethene	156-59-2	< 0.200	
cis-1,3-Dichloropropene	10061-01-5	< 0.200	
Cyclohexane	110-82-7	< 0.200	
Dichlorodifluoromethane	75-71-8	< 0.200	
Ethanol	64-17-5	< 0.630	
Ethylbenzene	100-41-4	< 0.200	
Heptane	142-82-5	< 0.200	
Hexachloro-1,3-butadiene	87-68-3	< 0.630	
Isopropylbenzene	98-82-8	< 0.200	
m&p-Xylene	1330-20-7	< 0.400	
Methyl Butyl Ketone	591-78-6	< 1.25	
Methyl Methacrylate	80-62-6	< 0.200	
MTBE	1634-04-4	< 0.200	
Methylene Chloride	75-09-2	< 0.200	
Naphthalene	91-20-3	< 0.630	
n-Hexane	110-54-3	< 0.200	
o-Xylene	95-47-6	< 0.200	
Propene	115-07-1	< 0.400	
Styrene	100-42-5	< 0.200	
Tetrachloroethylene	127-18-4	< 0.200	
Tetrahydrofuran	109-99-9	< 0.200	
Toluene	108-88-3	< 0.200	
trans-1,2-Dichloroethene	156-60-5	< 0.200	
trans-1,3-Dichloropropene	10061-02-6	< 0.200	
Trichloroethylene	79-01-6	< 0.200	
Trichlorofluoromethane	75-69-4	< 0.200	
Vinyl acetate	108-05-4	< 0.200	
Vinyl Bromide	593-60-2	< 0.200	
Vinyl chloride	75-01-4	< 0.200	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736022

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1-Trichloroethane	71-55-6	< 0.200	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.200	
1,1,2-Trichloroethane	79-00-5	< 0.200	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.200	
1,1-Dichloroethane	75-34-3	< 0.200	
1,1-Dichloroethene	75-35-4	< 0.200	
1,2,4-Trichlorobenzene	120-82-1	< 0.630	
1,2,4-Trimethylbenzene	95-63-6	< 0.200	
1,2-Dibromoethane	106-93-4	< 0.200	
1,2-Dichlorobenzene	95-50-1	< 0.200	
1,2-Dichloroethane	107-06-2	< 0.200	
1,2-Dichloropropane	78-87-5	< 0.200	
1,2-Dichlorotetrafluoroethane	76-14-2	< 0.200	
1,3,5-Trimethylbenzene	108-67-8	< 0.200	
1,3-Butadiene	106-99-0	< 2.00	
1,3-Dichlorobenzene	541-73-1	< 0.200	
1,4-Dichlorobenzene	106-46-7	< 0.200	
1,4-Dioxane	123-91-1	< 0.200	
2,2,4-Trimethylpentane	540-84-1	< 0.200	
2-Butanone (MEK)	78-93-3	< 1.25	
2-Chlorotoluene	95-49-8	< 0.200	
2-Propanol	67-63-0	< 1.25	
4-Ethyltoluene	622-96-8	< 0.200	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 1.25	
Acetone	67-64-1	< 1.25	
Allyl Chloride	107-05-1	< 0.200	
Benzene	71-43-2	< 0.200	
Benzyl Chloride	100-44-7	< 0.200	
Bromodichloromethane	75-27-4	< 0.200	
Bromoform	75-25-2	< 0.600	
Bromomethane	74-83-9	< 0.200	
Carbon disulfide	75-15-0	< 0.200	
Carbon tetrachloride	56-23-5	< 0.200	
Chlorobenzene	108-90-7	< 0.200	
Dibromochloromethane	124-48-1	< 0.200	
Chloroethane	75-00-3	< 0.200	
Chloroform	67-66-3	< 0.200	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736022

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Method Blank

Analyte	CAS	RDL	Qualifier
Chloromethane	74-87-3	< 0.200	
cis-1,2-Dichloroethene	156-59-2	< 0.200	
cis-1,3-Dichloropropene	10061-01-5	< 0.200	
Cyclohexane	110-82-7	< 0.200	
Dichlorodifluoromethane	75-71-8	< 0.200	
Ethanol	64-17-5	< 0.630	
Ethylbenzene	100-41-4	< 0.200	
Heptane	142-82-5	< 0.200	
Hexachloro-1,3-butadiene	87-68-3	< 0.630	
Isopropylbenzene	98-82-8	< 0.200	
m&p-Xylene	1330-20-7	< 0.400	
Methyl Butyl Ketone	591-78-6	< 1.25	
Methyl Methacrylate	80-62-6	< 0.200	
MTBE	1634-04-4	< 0.200	
Methylene Chloride	75-09-2	< 0.200	
Naphthalene	91-20-3	< 0.630	
n-Hexane	110-54-3	< 0.200	
o-Xylene	95-47-6	< 0.200	
Propene	115-07-1	< 0.400	
Styrene	100-42-5	< 0.200	
Tetrachloroethylene	127-18-4	< 0.200	
Tetrahydrofuran	109-99-9	< 0.200	
Toluene	108-88-3	< 0.200	
trans-1,2-Dichloroethene	156-60-5	< 0.200	
trans-1,3-Dichloropropene	10061-02-6	< 0.200	
Trichloroethylene	79-01-6	< 0.200	
Trichlorofluoromethane	75-69-4	< 0.200	
Vinyl acetate	108-05-4	< 0.200	
Vinyl Bromide	593-60-2	< 0.200	
Vinyl chloride	75-01-4	< 0.200	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736090

Analysis Date: 8/7/2014 6:48:00 PM

Analyst: 564

Instrument ID: AIRMS1

Sample Numbers: L713500-02, -04, -05

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1-Trichloroethane	71-55-6	< 0.200	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.200	
1,1,2-Trichloroethane	79-00-5	< 0.200	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.200	
1,1-Dichloroethane	75-34-3	< 0.200	
1,1-Dichloroethene	75-35-4	< 0.200	
1,2,4-Trichlorobenzene	120-82-1	< 0.630	
1,2,4-Trimethylbenzene	95-63-6	< 0.200	
1,2-Dibromoethane	106-93-4	< 0.200	
1,2-Dichlorobenzene	95-50-1	< 0.200	
1,2-Dichloroethane	107-06-2	< 0.200	
1,2-Dichloropropane	78-87-5	< 0.200	
1,2-Dichlorotetrafluoroethane	76-14-2	< 0.200	
1,3,5-Trimethylbenzene	108-67-8	< 0.200	
1,3-Butadiene	106-99-0	< 2.00	
1,3-Dichlorobenzene	541-73-1	< 0.200	
1,4-Dichlorobenzene	106-46-7	< 0.200	
1,4-Dioxane	123-91-1	< 0.200	
2,2,4-Trimethylpentane	540-84-1	< 0.200	
2-Butanone (MEK)	78-93-3	< 1.25	
2-Chlorotoluene	95-49-8	< 0.200	
2-Propanol	67-63-0	< 1.25	
4-Ethyltoluene	622-96-8	< 0.200	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 1.25	
Acetone	67-64-1	< 1.25	
Allyl Chloride	107-05-1	< 0.200	
Benzene	71-43-2	< 0.200	
Benzyl Chloride	100-44-7	< 0.200	
Bromodichloromethane	75-27-4	< 0.200	
Bromoform	75-25-2	< 0.600	
Bromomethane	74-83-9	< 0.200	
Carbon disulfide	75-15-0	< 0.200	
Carbon tetrachloride	56-23-5	< 0.200	
Chlorobenzene	108-90-7	< 0.200	
Dibromochloromethane	124-48-1	< 0.200	
Chloroethane	75-00-3	< 0.200	
Chloroform	67-66-3	< 0.200	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG736090**
 Analysis Date: 8/7/2014 6:48:00 PM Analyst: 564
 Instrument ID: AIRMS1
 Sample Numbers: L713500-02, -04, -05

Method Blank

Analyte	CAS	RDL	Qualifier
Chloromethane	74-87-3	< 0.200	
cis-1,2-Dichloroethene	156-59-2	< 0.200	
cis-1,3-Dichloropropene	10061-01-5	< 0.200	
Cyclohexane	110-82-7	< 0.200	
Dichlorodifluoromethane	75-71-8	< 0.200	
Ethanol	64-17-5	< 0.630	
Ethylbenzene	100-41-4	< 0.200	
Heptane	142-82-5	< 0.200	
Hexachloro-1,3-butadiene	87-68-3	< 0.630	
Isopropylbenzene	98-82-8	< 0.200	
m&p-Xylene	1330-20-7	< 0.400	
Methyl Butyl Ketone	591-78-6	< 1.25	
Methyl Methacrylate	80-62-6	< 0.200	
MTBE	1634-04-4	< 0.200	
Methylene Chloride	75-09-2	< 0.200	
Naphthalene	91-20-3	< 0.630	
n-Hexane	110-54-3	< 0.200	
o-Xylene	95-47-6	< 0.200	
Propene	115-07-1	< 0.400	
Styrene	100-42-5	< 0.200	
Tetrachloroethylene	127-18-4	< 0.200	
Tetrahydrofuran	109-99-9	< 0.200	
Toluene	108-88-3	< 0.200	
trans-1,2-Dichloroethene	156-60-5	< 0.200	
trans-1,3-Dichloropropene	10061-02-6	< 0.200	
Trichloroethylene	79-01-6	< 0.200	
Trichlorofluoromethane	75-69-4	< 0.200	
Vinyl acetate	108-05-4	< 0.200	
Vinyl Bromide	593-60-2	< 0.200	
Vinyl chloride	75-01-4	< 0.200	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG735732

Analysis Date: 8/6/2014 5:56:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	4.1795	111	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.4278	118	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.4489	119	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.2770	114	70 - 130	
1,1-Dichloroethane	1	3.75	4.3269	115	70 - 130	
1,1-Dichloroethene	1	3.75	4.0927	109	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.2027	112	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	4.2859	114	70 - 130	
1,2-Dibromoethane	1	3.75	4.3985	117	70 - 130	
1,2-Dichlorobenzene	1	3.75	4.2051	112	70 - 130	
1,2-Dichloroethane	1	3.75	4.0702	109	70 - 130	
1,2-Dichloroproppane	1	3.75	4.3975	117	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.2104	112	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	4.2221	113	70 - 130	
1,3-Butadiene	1	3.75	4.0291	107	70 - 130	
1,3-Dichlorobenzene	1	3.75	4.2987	115	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.2715	114	70 - 130	
1,4-Dioxane	1	3.75	4.5129	120	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.3607	116	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.5855	122	70 - 130	
2-Chlorotoluene	1	3.75	4.2362	113	70 - 130	
2-Propanol	1	3.75	4.6632	124	62.2 - 137	
4-Ethyltoluene	1	3.75	4.3059	115	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.5773	122	51.3 - 144	
Acetone	1	3.75	4.1183	110	70 - 130	
Allyl Chloride	1	3.75	4.2956	115	70 - 130	
Benzene	1	3.75	4.3482	116	70 - 130	
Benzyl Chloride	1	3.75	5.1004	136	70 - 130	J4
Bromodichloromethane	1	3.75	4.2934	114	70 - 130	
Bromoform	1	3.75	4.2247	113	70 - 130	
Bromomethane	1	3.75	4.2171	112	70 - 130	
Carbon disulfide	1	3.75	4.3540	116	70 - 130	
Carbon tetrachloride	1	3.75	4.1845	112	70 - 130	
Chlorobenzene	1	3.75	4.3600	116	70 - 130	
Dibromochloromethane	1	3.75	4.3558	116	70 - 130	
Chloroethane	1	3.75	4.2828	114	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG735732

Analysis Date: 8/6/2014 5:56:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.2274	113	70 - 130	
Chloromethane	1	3.75	4.0619	108	70 - 130	
cis-1,2-Dichloroethylene	1	3.75	4.2654	114	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.5361	121	70 - 130	
Cyclohexane	1	3.75	4.3904	117	70 - 130	
Dichlorodifluoromethane	1	3.75	4.3509	116	70 - 130	
Ethanol	1	3.75	4.4137	118	52.6 - 145	
Ethylbenzene	1	3.75	4.2973	115	70 - 130	
Heptane	1	3.75	4.2224	113	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	3.9279	105	55.7 - 144	
Isopropylbenzene	1	3.75	4.3273	115	70 - 130	
m&p-Xylene	1	7.5	8.4185	112	70 - 130	
Methyl Butyl Ketone	1	3.75	4.9246	131	36.5 - 155	
Methyl Methacrylate	1	3.75	4.0004	107	70 - 130	
MTBE	1	3.75	4.4340	118	70 - 130	
Methylene Chloride	1	3.75	3.9509	105	70 - 130	
Naphthalene	1	3.75	4.5347	121	53.4 - 158	
n-Hexane	1	3.75	4.3826	117	70 - 130	
o-Xylene	1	3.75	4.3505	116	70 - 130	
Propene	1	3.75	4.1754	111	70 - 130	
Styrene	1	3.75	4.5021	120	70 - 130	
Tetrachloroethylene	1	3.75	4.1286	110	70 - 130	
Tetrahydrofuran	1	3.75	4.4879	120	70 - 130	
Toluene	1	3.75	4.4278	118	70 - 130	
trans-1,2-Dichloroethylene	1	3.75	4.3013	115	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.4452	119	70 - 130	
Trichloroethylene	1	3.75	4.2616	114	70 - 130	
Trichlorofluoromethane	1	3.75	4.1227	110	70 - 130	
Vinyl acetate	1	3.75	4.6498	124	70 - 130	
Vinyl Bromide	1	3.75	4.2385	113	70 - 130	
Vinyl chloride	1	3.75	4.0777	109	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG735732**
 Analysis Date: 8/6/2014 5:56:00 PM Analyst: 564
 Instrument ID: AIRMS2
 Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	3.9091	104	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.1604	111	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.1635	111	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.0343	108	70 - 130	
1,1-Dichloroethane	1	3.75	4.0286	107	70 - 130	
1,1-Dichloroethene	1	3.75	3.8363	102	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.2180	112	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	4.0152	107	70 - 130	
1,2-Dibromoethane	1	3.75	4.1324	110	70 - 130	
1,2-Dichlorobenzene	1	3.75	3.9322	105	70 - 130	
1,2-Dichloroethane	1	3.75	3.8162	102	70 - 130	
1,2-Dichloroproppane	1	3.75	4.0706	109	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.0094	107	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	3.9772	106	70 - 130	
1,3-Butadiene	1	3.75	3.8411	102	70 - 130	
1,3-Dichlorobenzene	1	3.75	3.9964	107	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.0249	107	70 - 130	
1,4-Dioxane	1	3.75	4.3836	117	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.0280	107	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.2235	113	70 - 130	
2-Chlorotoluene	1	3.75	3.9757	106	70 - 130	
2-Propanol	1	3.75	4.4100	118	62.2 - 137	
4-Ethyltoluene	1	3.75	4.0193	107	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.2895	114	51.3 - 144	
Acetone	1	3.75	3.7839	101	70 - 130	
Allyl Chloride	1	3.75	4.0556	108	70 - 130	
Benzene	1	3.75	4.0487	108	70 - 130	
Benzyl Chloride	1	3.75	4.8108	128	70 - 130	
Bromodichloromethane	1	3.75	4.0070	107	70 - 130	
Bromoform	1	3.75	4.0076	107	70 - 130	
Bromomethane	1	3.75	4.0335	108	70 - 130	
Carbon disulfide	1	3.75	4.1362	110	70 - 130	
Carbon tetrachloride	1	3.75	3.9788	106	70 - 130	
Chlorobenzene	1	3.75	4.1104	110	70 - 130	
Dibromochloromethane	1	3.75	4.0839	109	70 - 130	
Chloroethane	1	3.75	3.9508	105	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG735732**
 Analysis Date: 8/6/2014 5:56:00 PM Analyst: 564
 Instrument ID: AIRMS2
 Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	3.9605	106	70 - 130	
Chloromethane	1	3.75	3.8045	101	70 - 130	
cis-1,2-Dichloroethylene	1	3.75	3.9980	107	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.2014	112	70 - 130	
Cyclohexane	1	3.75	4.0475	108	70 - 130	
Dichlorodifluoromethane	1	3.75	3.8609	103	70 - 130	
Ethanol	1	3.75	4.5232	121	52.6 - 145	
Ethylbenzene	1	3.75	4.0088	107	70 - 130	
Heptane	1	3.75	3.9290	105	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	3.8392	102	55.7 - 144	
Isopropylbenzene	1	3.75	4.0626	108	70 - 130	
m&p-Xylene	1	7.5	7.8891	105	70 - 130	
Methyl Butyl Ketone	1	3.75	4.6965	125	36.5 - 155	
Methyl Methacrylate	1	3.75	3.8654	103	70 - 130	
MTBE	1	3.75	4.1190	110	70 - 130	
Methylene Chloride	1	3.75	3.7275	99.4	70 - 130	
Naphthalene	1	3.75	4.4710	119	53.4 - 158	
n-Hexane	1	3.75	4.0168	107	70 - 130	
o-Xylene	1	3.75	4.0979	109	70 - 130	
Propene	1	3.75	3.9327	105	70 - 130	
Styrene	1	3.75	4.2472	113	70 - 130	
Tetrachloroethylene	1	3.75	3.8727	103	70 - 130	
Tetrahydrofuran	1	3.75	4.1718	111	70 - 130	
Toluene	1	3.75	4.1097	110	70 - 130	
trans-1,2-Dichloroethylene	1	3.75	4.0081	107	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.1518	111	70 - 130	
Trichloroethylene	1	3.75	3.9407	105	70 - 130	
Trichlorofluoromethane	1	3.75	3.9082	104	70 - 130	
Vinyl acetate	1	3.75	4.3344	116	70 - 130	
Vinyl Bromide	1	3.75	3.9287	105	70 - 130	
Vinyl chloride	1	3.75	3.8804	103	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: **WG735732**

Analysis Date: 8/6/2014 5:56:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
1,1,1-Trichloroethane	1	3.75	4.1795	111	3.9091	104	70 - 130		6.69	25	
1,1,2,2-Tetrachloroethane	1	3.75	4.4278	118	4.1604	111	70 - 130		6.23	25	
1,1,2-Trichloroethane	1	3.75	4.4489	119	4.1635	111	70 - 130		6.63	25	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.2770	114	4.0343	108	70 - 130		5.84	25	
1,1-Dichloroethane	1	3.75	4.3269	115	4.0286	107	70 - 130		7.14	25	
1,1-Dichloroethene	1	3.75	4.0927	109	3.8363	102	70 - 130		6.47	25	
1,2,4-Trichlorobenzene	1	3.75	4.2027	112	4.2180	112	59.7 - 155		0.36	25	
1,2,4-Trimethylbenzene	1	3.75	4.2859	114	4.0152	107	70 - 130		6.52	25	
1,2-Dibromoethane	1	3.75	4.3985	117	4.1324	110	70 - 130		6.24	25	
1,2-Dichlorobenzene	1	3.75	4.2051	112	3.9322	105	70 - 130		6.71	25	
1,2-Dichloroethane	1	3.75	4.0702	109	3.8162	102	70 - 130		6.44	25	
1,2-Dichloroproppane	1	3.75	4.3975	117	4.0706	109	70 - 130		7.72	25	
1,2-Dichlorotetrafluoroethane	1	3.75	4.2104	112	4.0094	107	70 - 130		4.89	25	
1,3,5-Trimethylbenzene	1	3.75	4.2221	113	3.9772	106	70 - 130		5.97	25	
1,3-Butadiene	1	3.75	4.0291	107	3.8411	102	70 - 130		4.78	25	
1,3-Dichlorobenzene	1	3.75	4.2987	115	3.9964	107	70 - 130		7.29	25	
1,4-Dichlorobenzene	1	3.75	4.2715	114	4.0249	107	70 - 130		5.95	25	
1,4-Dioxane	1	3.75	4.5129	120	4.3836	117	70 - 130		2.9	25	
2,2,4-Trimethylpentane	1	3.75	4.3607	116	4.0280	107	70 - 130		7.93	25	
Methyl Ethyl Ketone	1	3.75	4.5855	122	4.2235	113	70 - 130		8.22	25	
2-Chlorotoluene	1	3.75	4.2362	113	3.9757	106	70 - 130		6.34	25	
2-Propanol	1	3.75	4.6632	124	4.4100	118	62.2 - 137		5.58	25	
4-Ethyltoluene	1	3.75	4.3059	115	4.0193	107	70 - 130		6.89	25	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.5773	122	4.2895	114	51.3 - 144		6.49	25	
Acetone	1	3.75	4.1183	110	3.7839	101	70 - 130		8.46	25	
Allyl Chloride	1	3.75	4.2956	115	4.0556	108	70 - 130		5.75	25	
Benzene	1	3.75	4.3482	116	4.0487	108	70 - 130		7.13	25	
Benzyl Chloride	1	3.75	5.1004	136	4.8108	128	70 - 130	J4	5.84	25	
Bromodichloromethane	1	3.75	4.2934	114	4.0070	107	70 - 130		6.9	25	
Bromoform	1	3.75	4.2247	113	4.0076	107	70 - 130		5.27	25	
Bromomethane	1	3.75	4.2171	112	4.0335	108	70 - 130		4.45	25	
Carbon disulfide	1	3.75	4.3540	116	4.1362	110	70 - 130		5.13	25	
Carbon tetrachloride	1	3.75	4.1845	112	3.9788	106	70 - 130		5.04	25	
Chlorobenzene	1	3.75	4.3600	116	4.1104	110	70 - 130		5.89	25	
Dibromochloromethane	1	3.75	4.3558	116	4.0839	109	70 - 130		6.44	25	
Chloroethane	1	3.75	4.2828	114	3.9508	105	70 - 130		8.07	25	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: **WG735732**

Analysis Date: 8/6/2014 5:56:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Chloroform	1	3.75	4.2274	113	3.9605	106	70 - 130		6.52	25	
Chloromethane	1	3.75	4.0619	108	3.8045	101	70 - 130		6.54	25	
cis-1,2-Dichloroethene	1	3.75	4.2654	114	3.9980	107	70 - 130		6.47	25	
cis-1,3-Dichloropropene	1	3.75	4.5361	121	4.2014	112	70 - 130		7.66	25	
Cyclohexane	1	3.75	4.3904	117	4.0475	108	70 - 130		8.13	25	
Dichlorodifluoromethane	1	3.75	4.3509	116	3.8609	103	70 - 130		11.9	25	
Ethanol	1	3.75	4.4137	118	4.5232	121	52.6 - 145		2.45	25	
Ethylbenzene	1	3.75	4.2973	115	4.0088	107	70 - 130		6.95	25	
Heptane	1	3.75	4.2224	113	3.9290	105	70 - 130		7.2	25	
Hexachloro-1,3-butadiene	1	3.75	3.9279	105	3.8392	102	55.7 - 144		2.28	25	
Isopropylbenzene	1	3.75	4.3273	115	4.0626	108	70 - 130		6.31	25	
m&p-Xylene	1	7.5	8.4185	112	7.8891	105	70 - 130		6.49	25	
Methyl Butyl Ketone	1	3.75	4.9246	131	4.6965	125	36.5 - 155		4.74	25	
Methyl Methacrylate	1	3.75	4.0004	107	3.8654	103	70 - 130		3.43	25	
MTBE	1	3.75	4.4340	118	4.1190	110	70 - 130		7.37	25	
Methylene Chloride	1	3.75	3.9509	105	3.7275	99.4	70 - 130		5.82	25	
Naphthalene	1	3.75	4.5347	121	4.4710	119	53.4 - 158		1.41	25	
n-Hexane	1	3.75	4.3826	117	4.0168	107	70 - 130		8.71	25	
o-Xylene	1	3.75	4.3505	116	4.0979	109	70 - 130		5.98	25	
Propene	1	3.75	4.1754	111	3.9327	105	70 - 130		5.99	25	
Styrene	1	3.75	4.5021	120	4.2472	113	70 - 130		5.83	25	
Tetrachloroethylene	1	3.75	4.1286	110	3.8727	103	70 - 130		6.4	25	
Tetrahydrofuran	1	3.75	4.4879	120	4.1718	111	70 - 130		7.3	25	
Toluene	1	3.75	4.4278	118	4.1097	110	70 - 130		7.45	25	
trans-1,2-Dichloroethene	1	3.75	4.3013	115	4.0081	107	70 - 130		7.06	25	
trans-1,3-Dichloropropene	1	3.75	4.4452	119	4.1518	111	70 - 130		6.82	25	
Trichloroethylene	1	3.75	4.2616	114	3.9407	105	70 - 130		7.83	25	
Trichlorofluoromethane	1	3.75	4.1227	110	3.9082	104	70 - 130		5.34	25	
Vinyl acetate	1	3.75	4.6498	124	4.3344	116	70 - 130		7.02	25	
Vinyl Bromide	1	3.75	4.2385	113	3.9287	105	70 - 130		7.59	25	
Vinyl chloride	1	3.75	4.0777	109	3.8804	103	70 - 130		4.96	25	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736022

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	4.3831	117	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.7351	126	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.6154	123	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.7038	125	70 - 130	
1,1-Dichloroethane	1	3.75	4.6448	124	70 - 130	
1,1-Dichloroethene	1	3.75	4.4786	119	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.4082	118	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	4.4829	120	70 - 130	
1,2-Dibromoethane	1	3.75	4.6303	123	70 - 130	
1,2-Dichlorobenzene	1	3.75	4.3288	115	70 - 130	
1,2-Dichloroethane	1	3.75	4.3364	116	70 - 130	
1,2-Dichloropropane	1	3.75	4.7196	126	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.5747	122	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	4.5297	121	70 - 130	
1,3-Butadiene	1	3.75	4.3910	117	70 - 130	
1,3-Dichlorobenzene	1	3.75	4.4264	118	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.4179	118	70 - 130	
1,4-Dioxane	1	3.75	4.8429	129	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.6447	124	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.7986	128	70 - 130	
2-Chlorotoluene	1	3.75	4.4853	120	70 - 130	
2-Propanol	1	3.75	4.9861	133	62.2 - 137	
4-Ethyltoluene	1	3.75	4.5288	121	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.8008	128	51.3 - 144	
Acetone	1	3.75	4.3755	117	70 - 130	
Allyl Chloride	1	3.75	4.7710	127	70 - 130	
Benzene	1	3.75	4.7014	125	70 - 130	
Benzyl Chloride	1	3.75	5.2828	141	70 - 130	J4
Bromodichloromethane	1	3.75	4.5559	121	70 - 130	
Bromoform	1	3.75	4.3261	115	70 - 130	
Bromomethane	1	3.75	4.5933	122	70 - 130	
Carbon disulfide	1	3.75	4.8588	130	70 - 130	
Carbon tetrachloride	1	3.75	4.4652	119	70 - 130	
Chlorobenzene	1	3.75	4.5505	121	70 - 130	
Dibromochloromethane	1	3.75	4.5149	120	70 - 130	
Chloroethane	1	3.75	4.6539	124	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736022

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.4851	120	70 - 130	
Chloromethane	1	3.75	4.5433	121	70 - 130	
cis-1,2-Dichloroethylene	1	3.75	4.5968	123	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.7888	128	70 - 130	
Cyclohexane	1	3.75	4.6700	125	70 - 130	
Dichlorodifluoromethane	1	3.75	4.4726	119	70 - 130	
Ethanol	1	3.75	5.0306	134	52.6 - 145	
Ethylbenzene	1	3.75	4.5277	121	70 - 130	
Heptane	1	3.75	4.4854	120	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	4.1719	111	55.7 - 144	
Isopropylbenzene	1	3.75	4.5184	120	70 - 130	
m&p-Xylene	1	7.5	8.8203	118	70 - 130	
Methyl Butyl Ketone	1	3.75	5.2903	141	36.5 - 155	
Methyl Methacrylate	1	3.75	4.2940	115	70 - 130	
MTBE	1	3.75	4.6198	123	70 - 130	
Methylene Chloride	1	3.75	4.2990	115	70 - 130	
Naphthalene	1	3.75	4.9601	132	53.4 - 158	
n-Hexane	1	3.75	4.6995	125	70 - 130	
o-Xylene	1	3.75	4.5558	121	70 - 130	
Propene	1	3.75	4.5953	123	70 - 130	
Styrene	1	3.75	4.7403	126	70 - 130	
Tetrachloroethylene	1	3.75	4.2608	114	70 - 130	
Tetrahydrofuran	1	3.75	4.6724	125	70 - 130	
Toluene	1	3.75	4.6774	125	70 - 130	
trans-1,2-Dichloroethylene	1	3.75	4.6518	124	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.7270	126	70 - 130	
Trichloroethylene	1	3.75	4.5670	122	70 - 130	
Trichlorofluoromethane	1	3.75	4.4246	118	70 - 130	
Vinyl acetate	1	3.75	5.0057	133	70 - 130	J4
Vinyl Bromide	1	3.75	4.5936	122	70 - 130	
Vinyl chloride	1	3.75	4.4962	120	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736022

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	3.9832	106	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.2837	114	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.2464	113	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.1355	110	70 - 130	
1,1-Dichloroethane	1	3.75	4.1658	111	70 - 130	
1,1-Dichloroethene	1	3.75	3.9698	106	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	3.9358	105	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	4.0272	107	70 - 130	
1,2-Dibromoethane	1	3.75	4.2262	113	70 - 130	
1,2-Dichlorobenzene	1	3.75	3.8300	102	70 - 130	
1,2-Dichloroethane	1	3.75	3.8594	103	70 - 130	
1,2-Dichloropropane	1	3.75	4.3204	115	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.0896	109	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	4.0600	108	70 - 130	
1,3-Butadiene	1	3.75	3.8107	102	70 - 130	
1,3-Dichlorobenzene	1	3.75	3.9581	106	70 - 130	
1,4-Dichlorobenzene	1	3.75	3.9346	105	70 - 130	
1,4-Dioxane	1	3.75	4.3862	117	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.2280	113	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.3811	117	70 - 130	
2-Chlorotoluene	1	3.75	4.0937	109	70 - 130	
2-Propanol	1	3.75	4.5002	120	62.2 - 137	
4-Ethyltoluene	1	3.75	4.0562	108	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.2844	114	51.3 - 144	
Acetone	1	3.75	3.9248	105	70 - 130	
Allyl Chloride	1	3.75	4.2817	114	70 - 130	
Benzene	1	3.75	4.2205	113	70 - 130	
Benzyl Chloride	1	3.75	4.6647	124	70 - 130	
Bromodichloromethane	1	3.75	4.1080	110	70 - 130	
Bromoform	1	3.75	4.0130	107	70 - 130	
Bromomethane	1	3.75	4.0776	109	70 - 130	
Carbon disulfide	1	3.75	4.2939	115	70 - 130	
Carbon tetrachloride	1	3.75	3.9988	107	70 - 130	
Chlorobenzene	1	3.75	4.1965	112	70 - 130	
Dibromochloromethane	1	3.75	4.1467	111	70 - 130	
Chloroethane	1	3.75	4.1213	110	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736022

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.0358	108	70 - 130	
Chloromethane	1	3.75	3.9590	106	70 - 130	
cis-1,2-Dichloroethylene	1	3.75	4.0888	109	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.3449	116	70 - 130	
Cyclohexane	1	3.75	4.1905	112	70 - 130	
Dichlorodifluoromethane	1	3.75	4.4254	118	70 - 130	
Ethanol	1	3.75	4.6999	125	52.6 - 145	
Ethylbenzene	1	3.75	4.1745	111	70 - 130	
Heptane	1	3.75	4.1008	109	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	3.7121	99	55.7 - 144	
Isopropylbenzene	1	3.75	4.1566	111	70 - 130	
m&p-Xylene	1	7.5	8.1925	109	70 - 130	
Methyl Butyl Ketone	1	3.75	4.7054	125	36.5 - 155	
Methyl Methacrylate	1	3.75	3.9595	106	70 - 130	
MTBE	1	3.75	4.2299	113	70 - 130	
Methylene Chloride	1	3.75	3.8374	102	70 - 130	
Naphthalene	1	3.75	4.4077	118	53.4 - 158	
n-Hexane	1	3.75	4.2320	113	70 - 130	
o-Xylene	1	3.75	4.1931	112	70 - 130	
Propene	1	3.75	4.1082	110	70 - 130	
Styrene	1	3.75	4.3217	115	70 - 130	
Tetrachloroethylene	1	3.75	3.9178	104	70 - 130	
Tetrahydrofuran	1	3.75	4.2172	112	70 - 130	
Toluene	1	3.75	4.2520	113	70 - 130	
trans-1,2-Dichloroethylene	1	3.75	4.1012	109	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.2913	114	70 - 130	
Trichloroethylene	1	3.75	4.1334	110	70 - 130	
Trichlorofluoromethane	1	3.75	3.9530	105	70 - 130	
Vinyl acetate	1	3.75	4.5374	121	70 - 130	
Vinyl Bromide	1	3.75	4.0749	109	70 - 130	
Vinyl chloride	1	3.75	3.9469	105	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: **WG736022**

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control RPD Limits	Control RPD Qual
1,1,1-Trichloroethane	1	3.75	4.3831	117	3.9832	106	70 - 130		9.56	25	
1,1,2,2-Tetrachloroethane	1	3.75	4.7351	126	4.2837	114	70 - 130		10	25	
1,1,2-Trichloroethane	1	3.75	4.6154	123	4.2464	113	70 - 130		8.33	25	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.7038	125	4.1355	110	70 - 130		12.9	25	
1,1-Dichloroethane	1	3.75	4.6448	124	4.1658	111	70 - 130		10.9	25	
1,1-Dichloroethene	1	3.75	4.4786	119	3.9698	106	70 - 130		12	25	
1,2,4-Trichlorobenzene	1	3.75	4.4082	118	3.9358	105	59.7 - 155		11.3	25	
1,2,4-Trimethylbenzene	1	3.75	4.4829	120	4.0272	107	70 - 130		10.7	25	
1,2-Dibromoethane	1	3.75	4.6303	123	4.2262	113	70 - 130		9.13	25	
1,2-Dichlorobenzene	1	3.75	4.3288	115	3.8300	102	70 - 130		12.2	25	
1,2-Dichloroethane	1	3.75	4.3364	116	3.8594	103	70 - 130		11.6	25	
1,2-Dichloropropane	1	3.75	4.7196	126	4.3204	115	70 - 130		8.83	25	
1,2-Dichlortetrafluoroethane	1	3.75	4.5747	122	4.0896	109	70 - 130		11.2	25	
1,3,5-Trimethylbenzene	1	3.75	4.5297	121	4.0600	108	70 - 130		10.9	25	
1,3-Butadiene	1	3.75	4.3910	117	3.8107	102	70 - 130		14.2	25	
1,3-Dichlorobenzene	1	3.75	4.4264	118	3.9581	106	70 - 130		11.2	25	
1,4-Dichlorobenzene	1	3.75	4.4179	118	3.9346	105	70 - 130		11.6	25	
1,4-Dioxane	1	3.75	4.8429	129	4.3862	117	70 - 130		9.9	25	
2,2,4-Trimethylpentane	1	3.75	4.6447	124	4.2280	113	70 - 130		9.39	25	
Methyl Ethyl Ketone	1	3.75	4.7986	128	4.3811	117	70 - 130		9.1	25	
2-Chlorotoluene	1	3.75	4.4853	120	4.0937	109	70 - 130		9.13	25	
2-Propanol	1	3.75	4.9861	133	4.5002	120	62.2 - 137		10.2	25	
4-Ethyltoluene	1	3.75	4.5288	121	4.0562	108	70 - 130		11	25	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.8008	128	4.2844	114	51.3 - 144		11.4	25	
Acetone	1	3.75	4.3755	117	3.9248	105	70 - 130		10.9	25	
Allyl Chloride	1	3.75	4.7710	127	4.2817	114	70 - 130		10.8	25	
Benzene	1	3.75	4.7014	125	4.2205	113	70 - 130		10.8	25	
Benzyl Chloride	1	3.75	5.2828	141	4.6647	124	70 - 130	J4	12.4	25	
Bromodichloromethane	1	3.75	4.5559	121	4.1080	110	70 - 130		10.3	25	
Bromoform	1	3.75	4.3261	115	4.0130	107	70 - 130		7.51	25	
Bromomethane	1	3.75	4.5933	122	4.0776	109	70 - 130		11.9	25	
Carbon disulfide	1	3.75	4.8588	130	4.2939	115	70 - 130		12.3	25	
Carbon tetrachloride	1	3.75	4.4652	119	3.9988	107	70 - 130		11	25	
Chlorobenzene	1	3.75	4.5505	121	4.1965	112	70 - 130		8.1	25	
Dibromochloromethane	1	3.75	4.5149	120	4.1467	111	70 - 130		8.5	25	
Chloroethane	1	3.75	4.6539	124	4.1213	110	70 - 130		12.1	25	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736022

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Chloroform	1	3.75	4.4851	120	4.0358	108	70 - 130		10.6	25	
Chloromethane	1	3.75	4.5433	121	3.9590	106	70 - 130		13.8	25	
cis-1,2-Dichloroethylene	1	3.75	4.5968	123	4.0888	109	70 - 130		11.7	25	
cis-1,3-Dichloropropene	1	3.75	4.7888	128	4.3449	116	70 - 130		9.72	25	
Cyclohexane	1	3.75	4.6700	125	4.1905	112	70 - 130		10.8	25	
Dichlorodifluoromethane	1	3.75	4.4726	119	4.4254	118	70 - 130		1.06	25	
Ethanol	1	3.75	5.0306	134	4.6999	125	52.6 - 145		6.8	25	
Ethylbenzene	1	3.75	4.5277	121	4.1745	111	70 - 130		8.12	25	
Heptane	1	3.75	4.4854	120	4.1008	109	70 - 130		8.96	25	
Hexachloro-1,3-butadiene	1	3.75	4.1719	111	3.7121	99	55.7 - 144		11.7	25	
Isopropylbenzene	1	3.75	4.5184	120	4.1566	111	70 - 130		8.34	25	
m&p-Xylene	1	7.5	8.8203	118	8.1925	109	70 - 130		7.38	25	
Methyl Butyl Ketone	1	3.75	5.2903	141	4.7054	125	36.5 - 155		11.7	25	
Methyl Methacrylate	1	3.75	4.2940	115	3.9595	106	70 - 130		8.1	25	
MTBE	1	3.75	4.6198	123	4.2299	113	70 - 130		8.81	25	
Methylene Chloride	1	3.75	4.2990	115	3.8374	102	70 - 130		11.4	25	
Naphthalene	1	3.75	4.9601	132	4.4077	118	53.4 - 158		11.8	25	
n-Hexane	1	3.75	4.6995	125	4.2320	113	70 - 130		10.5	25	
o-Xylene	1	3.75	4.5558	121	4.1931	112	70 - 130		8.29	25	
Propene	1	3.75	4.5953	123	4.1082	110	70 - 130		11.2	25	
Styrene	1	3.75	4.7403	126	4.3217	115	70 - 130		9.24	25	
Tetrachloroethylene	1	3.75	4.2608	114	3.9178	104	70 - 130		8.39	25	
Tetrahydrofuran	1	3.75	4.6724	125	4.2172	112	70 - 130		10.2	25	
Toluene	1	3.75	4.6774	125	4.2520	113	70 - 130		9.53	25	
trans-1,2-Dichloroethylene	1	3.75	4.6518	124	4.1012	109	70 - 130		12.6	25	
trans-1,3-Dichloropropene	1	3.75	4.7270	126	4.2913	114	70 - 130		9.66	25	
Trichloroethylene	1	3.75	4.5670	122	4.1334	110	70 - 130		9.97	25	
Trichlorofluoromethane	1	3.75	4.4246	118	3.9530	105	70 - 130		11.3	25	
Vinyl acetate	1	3.75	5.0057	133	4.5374	121	70 - 130	J4	9.81	25	
Vinyl Bromide	1	3.75	4.5936	122	4.0749	109	70 - 130		12	25	
Vinyl chloride	1	3.75	4.4962	120	3.9469	105	70 - 130		13	25	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736090

Analysis Date: 8/7/2014 6:48:00 PM

Analyst: 564

Instrument ID: AIRMS1

Sample Numbers: L713500-02, -04, -05

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	3.9614	106	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.0444	108	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.0285	107	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	3.8476	103	70 - 130	
1,1-Dichloroethane	1	3.75	4.1790	111	70 - 130	
1,1-Dichloroethene	1	3.75	4.1894	112	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	3.8719	103	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	3.8369	102	70 - 130	
1,2-Dibromoethane	1	3.75	4.0157	107	70 - 130	
1,2-Dichlorobenzene	1	3.75	3.7900	101	70 - 130	
1,2-Dichloroethane	1	3.75	4.0860	109	70 - 130	
1,2-Dichloropropane	1	3.75	4.3189	115	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	3.9382	105	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	3.7840	101	70 - 130	
1,3-Butadiene	1	3.75	4.3463	116	70 - 130	
1,3-Dichlorobenzene	1	3.75	3.8057	101	70 - 130	
1,4-Dichlorobenzene	1	3.75	3.7994	101	70 - 130	
1,4-Dioxane	1	3.75	3.9063	104	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.3948	117	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.3249	115	70 - 130	
2-Chlorotoluene	1	3.75	4.0937	109	70 - 130	
2-Propanol	1	3.75	4.5636	122	62.2 - 137	
4-Ethyltoluene	1	3.75	4.0433	108	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.3784	117	51.3 - 144	
Acetone	1	3.75	5.4994	147	70 - 130	J4
Allyl Chloride	1	3.75	4.4625	119	70 - 130	
Benzene	1	3.75	4.2594	114	70 - 130	
Benzyl Chloride	1	3.75	0.0	0	70 - 130	J4
Bromodichloromethane	1	3.75	4.0755	109	70 - 130	
Bromoform	1	3.75	3.8681	103	70 - 130	
Bromomethane	1	3.75	3.8293	102	70 - 130	
Carbon disulfide	1	3.75	3.9538	105	70 - 130	
Carbon tetrachloride	1	3.75	3.5939	95.8	70 - 130	
Chlorobenzene	1	3.75	3.9627	106	70 - 130	
Dibromochloromethane	1	3.75	3.9076	104	70 - 130	
Chloroethane	1	3.75	4.2311	113	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG736090**
 Analysis Date: 8/7/2014 6:48:00 PM Analyst: 564
 Instrument ID: AIRMS1
 Sample Numbers: L713500-02, -04, -05

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.0108	107	70 - 130	
Chloromethane	1	3.75	4.1771	111	70 - 130	
cis-1,2-Dichloroethene	1	3.75	4.2703	114	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.2373	113	70 - 130	
Cyclohexane	1	3.75	4.1625	111	70 - 130	
Dichlorodifluoromethane	1	3.75	3.8048	101	70 - 130	
Ethanol	1	3.75	7.4347	198	52.6 - 145	J4
Ethylbenzene	1	3.75	4.2934	114	70 - 130	
Heptane	1	3.75	4.5331	121	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	3.8258	102	55.7 - 144	
Isopropylbenzene	1	3.75	4.1472	111	70 - 130	
m&p-Xylene	1	7.5	8.0793	108	70 - 130	
Methyl Butyl Ketone	1	3.75	3.5881	95.7	36.5 - 155	
Methyl Methacrylate	1	3.75	4.2045	112	70 - 130	
MTBE	1	3.75	3.9764	106	70 - 130	
Methylene Chloride	1	3.75	4.0182	107	70 - 130	
Naphthalene	1	3.75	3.6437	97.2	53.4 - 158	
n-Hexane	1	3.75	4.4300	118	70 - 130	
o-Xylene	1	3.75	4.2773	114	70 - 130	
Propene	1	3.75	4.2637	114	70 - 130	
Styrene	1	3.75	3.3002	88	70 - 130	
Tetrachloroethylene	1	3.75	3.7806	101	70 - 130	
Tetrahydrofuran	1	3.75	4.5517	121	70 - 130	
Toluene	1	3.75	4.1298	110	70 - 130	
trans-1,2-Dichloroethene	1	3.75	4.1507	111	70 - 130	
trans-1,3-Dichloropropene	1	3.75	3.9619	106	70 - 130	
Trichloroethylene	1	3.75	3.9365	105	70 - 130	
Trichlorofluoromethane	1	3.75	3.7311	99.5	70 - 130	
Vinyl acetate	1	3.75	3.0660	81.8	70 - 130	
Vinyl Bromide	1	3.75	3.7797	101	70 - 130	
Vinyl chloride	1	3.75	4.1148	110	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736090

Analysis Date: 8/7/2014 6:48:00 PM

Analyst: 564

Instrument ID: AIRMS1

Sample Numbers: L713500-02, -04, -05

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	4.0052	107	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.1626	111	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.1719	111	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	3.9598	106	70 - 130	
1,1-Dichloroethane	1	3.75	4.2354	113	70 - 130	
1,1-Dichloroethene	1	3.75	4.2500	113	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.0216	107	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	3.9566	106	70 - 130	
1,2-Dibromoethane	1	3.75	4.1256	110	70 - 130	
1,2-Dichlorobenzene	1	3.75	3.9056	104	70 - 130	
1,2-Dichloroethane	1	3.75	4.1919	112	70 - 130	
1,2-Dichloropropane	1	3.75	4.4233	118	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.0308	107	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	3.8560	103	70 - 130	
1,3-Butadiene	1	3.75	4.4211	118	70 - 130	
1,3-Dichlorobenzene	1	3.75	3.9222	105	70 - 130	
1,4-Dichlorobenzene	1	3.75	3.9423	105	70 - 130	
1,4-Dioxane	1	3.75	4.0114	107	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.4256	118	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.1656	111	70 - 130	
2-Chlorotoluene	1	3.75	4.2173	112	70 - 130	
2-Propanol	1	3.75	4.7102	126	62.2 - 137	
4-Ethyltoluene	1	3.75	4.0833	109	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.5210	121	51.3 - 144	
Acetone	1	3.75	5.5369	148	70 - 130	J4
Allyl Chloride	1	3.75	4.5645	122	70 - 130	
Benzene	1	3.75	4.3534	116	70 - 130	
Benzyl Chloride	1	3.75	0.6016	16	70 - 130	J4
Bromodichloromethane	1	3.75	4.1749	111	70 - 130	
Bromoform	1	3.75	4.0017	107	70 - 130	
Bromomethane	1	3.75	3.8823	104	70 - 130	
Carbon disulfide	1	3.75	4.0307	107	70 - 130	
Carbon tetrachloride	1	3.75	3.7384	99.7	70 - 130	
Chlorobenzene	1	3.75	4.0396	108	70 - 130	
Dibromochloromethane	1	3.75	3.9962	107	70 - 130	
Chloroethane	1	3.75	4.3111	115	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736090

Analysis Date: 8/7/2014 6:48:00 PM

Analyst: 564

Instrument ID: AIRMS1

Sample Numbers: L713500-02, -04, -05

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.0585	108	70 - 130	
Chloromethane	1	3.75	4.2703	114	70 - 130	
cis-1,2-Dichloroethylene	1	3.75	4.3770	117	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.3320	116	70 - 130	
Cyclohexane	1	3.75	4.2585	114	70 - 130	
Dichlorodifluoromethane	1	3.75	3.9232	105	70 - 130	
Ethanol	1	3.75	8.1789	218	52.6 - 145	J4
Ethylbenzene	1	3.75	4.375	117	70 - 130	
Heptane	1	3.75	4.6187	123	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	4.0141	107	55.7 - 144	
Isopropylbenzene	1	3.75	4.2414	113	70 - 130	
m&p-Xylene	1	7.5	8.3816	112	70 - 130	
Methyl Butyl Ketone	1	3.75	3.6958	98.6	36.5 - 155	
Methyl Methacrylate	1	3.75	4.2972	115	70 - 130	
MTBE	1	3.75	4.0317	108	70 - 130	
Methylene Chloride	1	3.75	4.1242	110	70 - 130	
Naphthalene	1	3.75	3.8041	101	53.4 - 158	
n-Hexane	1	3.75	4.4684	119	70 - 130	
o-Xylene	1	3.75	4.3712	117	70 - 130	
Propene	1	3.75	4.4251	118	70 - 130	
Styrene	1	3.75	3.4025	90.7	70 - 130	
Tetrachloroethylene	1	3.75	3.8726	103	70 - 130	
Tetrahydrofuran	1	3.75	4.7231	126	70 - 130	
Toluene	1	3.75	4.1905	112	70 - 130	
trans-1,2-Dichloroethylene	1	3.75	4.2356	113	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.0558	108	70 - 130	
Trichloroethylene	1	3.75	4.0888	109	70 - 130	
Trichlorofluoromethane	1	3.75	3.8897	104	70 - 130	
Vinyl acetate	1	3.75	3.1295	83.5	70 - 130	
Vinyl Bromide	1	3.75	3.8753	103	70 - 130	
Vinyl chloride	1	3.75	4.1989	112	70 - 130	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736090

Analysis Date: 8/7/2014 6:48:00 PM

Analyst: 564

Instrument ID: AIRMS1

Sample Numbers: L713500-02, -04, -05

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control RPD Limits	Control RPD Qual
1,1,1-Trichloroethane	1	3.75	3.9614	106	4.0052	107	70 - 130		1.1	25	
1,1,2,2-Tetrachloroethane	1	3.75	4.0444	108	4.1626	111	70 - 130		2.88	25	
1,1,2-Trichloroethane	1	3.75	4.0285	107	4.1719	111	70 - 130		3.5	25	
1,1,2-Trichlorotrifluoroethane	1	3.75	3.8476	103	3.9598	106	70 - 130		2.88	25	
1,1-Dichloroethane	1	3.75	4.1790	111	4.2354	113	70 - 130		1.34	25	
1,1-Dichloroethene	1	3.75	4.1894	112	4.2500	113	70 - 130		1.44	25	
1,2,4-Trichlorobenzene	1	3.75	3.8719	103	4.0216	107	59.7 - 155		3.79	25	
1,2,4-Trimethylbenzene	1	3.75	3.8369	102	3.9566	106	70 - 130		3.07	25	
1,2-Dibromoethane	1	3.75	4.0157	107	4.1256	110	70 - 130		2.7	25	
1,2-Dichlorobenzene	1	3.75	3.7900	101	3.9056	104	70 - 130		3	25	
1,2-Dichloroethane	1	3.75	4.0860	109	4.1919	112	70 - 130		2.56	25	
1,2-Dichloropropane	1	3.75	4.3189	115	4.4233	118	70 - 130		2.39	25	
1,2-Dichlortetrafluoroethane	1	3.75	3.9382	105	4.0308	107	70 - 130		2.32	25	
1,3,5-Trimethylbenzene	1	3.75	3.7840	101	3.8560	103	70 - 130		1.88	25	
1,3-Butadiene	1	3.75	4.3463	116	4.4211	118	70 - 130		1.71	25	
1,3-Dichlorobenzene	1	3.75	3.8057	101	3.9222	105	70 - 130		3.01	25	
1,4-Dichlorobenzene	1	3.75	3.7994	101	3.9423	105	70 - 130		3.69	25	
1,4-Dioxane	1	3.75	3.9063	104	4.0114	107	70 - 130		2.66	25	
2,2,4-Trimethylpentane	1	3.75	4.3948	117	4.4256	118	70 - 130		0.7	25	
Methyl Ethyl Ketone	1	3.75	4.3249	115	4.1656	111	70 - 130		3.75	25	
2-Chlorotoluene	1	3.75	4.0937	109	4.2173	112	70 - 130		2.97	25	
2-Propanol	1	3.75	4.5636	122	4.7102	126	62.2 - 137		3.16	25	
4-Ethyltoluene	1	3.75	4.0433	108	4.0833	109	70 - 130		0.98	25	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.3784	117	4.5210	121	51.3 - 144		3.21	25	
Acetone	1	3.75	5.4994	147	5.5369	148	70 - 130	J4	0.68	25	
Allyl Chloride	1	3.75	4.4625	119	4.5645	122	70 - 130		2.26	25	
Benzene	1	3.75	4.2594	114	4.3534	116	70 - 130		2.18	25	
Benzyl Chloride	1	3.75	0.0	0	0.6016	16	70 - 130	J4	200	25	J3
Bromodichloromethane	1	3.75	4.0755	109	4.1749	111	70 - 130		2.41	25	
Bromoform	1	3.75	3.8681	103	4.0017	107	70 - 130		3.4	25	
Bromomethane	1	3.75	3.8293	102	3.8823	104	70 - 130		1.37	25	
Carbon disulfide	1	3.75	3.9538	105	4.0307	107	70 - 130		1.93	25	
Carbon tetrachloride	1	3.75	3.5939	95.8	3.7384	99.7	70 - 130		3.94	25	
Chlorobenzene	1	3.75	3.9627	106	4.0396	108	70 - 130		1.92	25	
Dibromochloromethane	1	3.75	3.9076	104	3.9962	107	70 - 130		2.24	25	
Chloroethane	1	3.75	4.2311	113	4.3111	115	70 - 130		1.87	25	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736090

Analysis Date: 8/7/2014 6:48:00 PM

Analyst: 564

Instrument ID: AIRMS1

Sample Numbers: L713500-02, -04, -05

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control RPD Limits	Control RPD Qual
Chloroform	1	3.75	4.0108	107	4.0585	108	70 - 130		1.18	25	
Chloromethane	1	3.75	4.1771	111	4.2703	114	70 - 130		2.21	25	
cis-1,2-Dichloroethylene	1	3.75	4.2703	114	4.3770	117	70 - 130		2.47	25	
cis-1,3-Dichloropropene	1	3.75	4.2373	113	4.3320	116	70 - 130		2.21	25	
Cyclohexane	1	3.75	4.1625	111	4.2585	114	70 - 130		2.28	25	
Dichlorodifluoromethane	1	3.75	3.8048	101	3.9232	105	70 - 130		3.06	25	
Ethanol	1	3.75	7.4347	198	8.1789	218	52.6 - 145	J4	9.53	25	
Ethylbenzene	1	3.75	4.2934	114	4.375	117	70 - 130		1.88	25	
Heptane	1	3.75	4.5331	121	4.6187	123	70 - 130		1.87	25	
Hexachloro-1,3-butadiene	1	3.75	3.8258	102	4.0141	107	55.7 - 144		4.8	25	
Isopropylbenzene	1	3.75	4.1472	111	4.2414	113	70 - 130		2.25	25	
m&p-Xylene	1	7.5	8.0793	108	8.3816	112	70 - 130		3.67	25	
Methyl Butyl Ketone	1	3.75	3.5881	95.7	3.6958	98.6	36.5 - 155		2.96	25	
Methyl Methacrylate	1	3.75	4.2045	112	4.2972	115	70 - 130		2.18	25	
MTBE	1	3.75	3.9764	106	4.0317	108	70 - 130		1.38	25	
Methylene Chloride	1	3.75	4.0182	107	4.1242	110	70 - 130		2.61	25	
Naphthalene	1	3.75	3.6437	97.2	3.8041	101	53.4 - 158		4.31	25	
n-Hexane	1	3.75	4.4300	118	4.4684	119	70 - 130		0.86	25	
o-Xylene	1	3.75	4.2773	114	4.3712	117	70 - 130		2.17	25	
Propene	1	3.75	4.2637	114	4.4251	118	70 - 130		3.72	25	
Styrene	1	3.75	3.3002	88	3.4025	90.7	70 - 130		3.05	25	
Tetrachloroethylene	1	3.75	3.7806	101	3.8726	103	70 - 130		2.4	25	
Tetrahydrofuran	1	3.75	4.5517	121	4.7231	126	70 - 130		3.7	25	
Toluene	1	3.75	4.1298	110	4.1905	112	70 - 130		1.46	25	
trans-1,2-Dichloroethylene	1	3.75	4.1507	111	4.2356	113	70 - 130		2.02	25	
trans-1,3-Dichloropropene	1	3.75	3.9619	106	4.0558	108	70 - 130		2.34	25	
Trichloroethylene	1	3.75	3.9365	105	4.0888	109	70 - 130		3.79	25	
Trichlorofluoromethane	1	3.75	3.7311	99.5	3.8897	104	70 - 130		4.16	25	
Vinyl acetate	1	3.75	3.0660	81.8	3.1295	83.5	70 - 130		2.05	25	
Vinyl Bromide	1	3.75	3.7797	101	3.8753	103	70 - 130		2.5	25	
Vinyl chloride	1	3.75	4.1148	110	4.1989	112	70 - 130		2.02	25	

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG735732**
 Analysis Date: 8/6/2014 5:56:00 PM Analyst: 564
 Instrument ID: AIRMS2
 Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Internal Standard Response and Retention Time Summary

File ID: ICAL AVG
Analyzed: 080114

	IS2		CB			
	Response	RT	Response	RT	Response	RT
12 Hr. Std	14906020	12.44	3985716	10.71	12245854	17.57
Upper Limit	20900000	12.94	5580000	11.21	17100000	18.07
Lower Limit	8940000	11.94	2390000	10.21	7350000	17.07
Sample ID	Response	RT	Response	RT	Response	RT
L713500-01 2X	12815680	12.43	3303454	10.71	10347770	17.57
L713500-02 2X	12324180	12.44	3206928	10.72	9743063	17.57
L713500-03 2X	12487980	12.44	3251583	10.71	10538340	17.57
L713500-04 4X	12408560	12.45	3312857	10.72	9576374	17.58
L713500-05 2X	13760900	12.44	3547785	10.71	11255760	17.57
L713500-06 2X	14213470	12.43	3660834	10.70	11936510	17.57
LCSD WG735732	14427500	12.43	3787941	10.70	12185100	17.57
LCS WG735732	14037800	12.44	3682519	10.71	11703050	17.57
BLANK WG735732	12224880	12.43	3235049	10.70	10261820	17.57

Legend:

IS2 -- 1,4-Difluorobenzene

-- Bromochloromethane

CB -- Chlorobenzene-d5

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG736022**
 Analysis Date: 8/7/2014 4:42:00 PM Analyst: 564
 Instrument ID: AIRMS2
 Sample Numbers: L713500-01

Internal Standard Response and Retention Time Summary

File ID: ICAL AVG
Analyzed: 080114

	IS2		CB			
	Response	RT	Response	RT	Response	RT
12 Hr. Std	14906020	12.44	3985716	10.71	12245854	17.57
Upper Limit	20900000	12.94	5580000	11.21	17100000	18.07
Lower Limit	8940000	11.94	2390000	10.21	7350000	17.07
Sample ID	Response	RT	Response	RT	Response	RT
L713500-01 25X	12020120	12.43	3325634	10.70	10233320	17.57
LCSD WG736022	15009710	12.43	3957143	10.70	12363800	17.57
LCS WG736022	13499230	12.43	3556920	10.70	11200540	17.57
BLANK WG736022	12614070	12.43	3326779	10.70	10755800	17.57

Legend:

IS2 -- 1,4-Difluorobenzene

-- Bromochloromethane

CB -- Chlorobenzene-d5

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15
 Project No: 24149141 Matrix: Air - ppb
 Project: Airport & Steam Cleaners EPA ID: TN00003
 Collection Date: 7/30/2014 Analytic Batch: **WG736090**
 Analysis Date: 8/7/2014 6:48:00 PM Analyst: 564
 Instrument ID: AIRMS1
 Sample Numbers: L713500-02, -04, -05

Internal Standard Response and Retention Time Summary

File ID: ICAL AVG
Analyzed: 072914

	IS2		CB			
	Response	RT	Response	RT	Response	RT
12 Hr. Std	23665022	12.12	8088641	10.74	18117867	16.85
Upper Limit	33100000	12.62	11300000	11.24	25400000	17.35
Lower Limit	14200000	11.62	4850000	10.24	10900000	16.35
Sample ID	Response	RT	Response	RT	Response	RT
L713500-02 25X	21322780	12.12	7598051	10.73	15695080	16.85
L713500-04 160X	22184750	12.12	7683645	10.73	16261200	16.85
L713500-05 20X	21277180	12.13	7495711	10.75	14989850	16.85
LCSD WG736090	22188340	12.13	7705674	10.74	16371490	16.85
LCS WG736090	22646890	12.12	7854510	10.74	16845920	16.85
BLANK WG736090	21545760	12.12	7804400	10.74	15572410	16.85

Legend:

IS2 -- 1,4-Difluorobenzene

-- Bromochloromethane

CB -- Chlorobenzene-d5



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary

SDG: L713500
Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG735732

Analysis Date: 8/6/2014 5:56:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01, -02, -03, -04, -05, -06

Surrogate Summary

BFB

Laboratory

Sample ID	Instrument	File ID	ppb	% Rec
L713500-01 2x	AIRMS2	0806_13	4.15	104
L713500-02 2x	AIRMS2	0806_14	4.19	105
L713500-03 2x	AIRMS2	0806_15	4.23	106
L713500-04 4x	AIRMS2	0806_16	3.95	98.8
L713500-05 2x	AIRMS2	0806_17	4.09	102
L713500-06 2x	AIRMS2	0806_18	4.13	103
LCS WG735732	AIRMS2	0806_03	4.12	103
LCSD WG735732	AIRMS2	0806_04	4.13	103
BLANK WG735732	AIRMS2	0806_05	4.07	102

BFB --1,4-BROMOFLUOROBENZENE

True Value: 4 ppb Limits: 60 - 140



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Quality Control Summary

SDG: L713500
Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736022

Analysis Date: 8/7/2014 4:42:00 PM

Analyst: 564

Instrument ID: AIRMS2

Sample Numbers: L713500-01

Surrogate Summary

BFB

Laboratory

Sample ID

Instrument

File ID

ppb

% Rec

L713500-01 25x	AIRMS2	0807_10	4.15	104
LCS WG736022	AIRMS2	0807_02	4.13	103
LCSD WG736022	AIRMS2	0807_03	4.14	104
BLANK WG736022	AIRMS2	0807_04	3.93	98.1

BFB --1,4-BROMOFLUOROBENZENE

True Value: 4 ppb Limits: 60 - 140



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Tax I.D 62-0814289
Est. 1970

Quality Control Summary

SDG: L713500

Terracon - Cheyenne

Test: VOCs in Air by Method TO-15

Project No: 24149141

Matrix: Air - ppb

Project: Airport & Steam Cleaners

EPA ID: TN00003

Collection Date: 7/30/2014

Analytic Batch: WG736090

Analysis Date: 8/7/2014 6:48:00 PM

Analyst: 564

Instrument ID: AIRMS1

Sample Numbers: L713500-02, -04, -05

Surrogate Summary

BFB

Laboratory

Sample ID	Instrument	File ID	ppb	% Rec
L713500-02 25x	AIRMS1	0807_08	4.28	107
L713500-04 160x	AIRMS1	0807_09	4.18	104
L713500-05 20x	AIRMS1	0807_10	3.69	92.2
LCS WG736090	AIRMS1	0807_02	4.04	101
LCSD WG736090	AIRMS1	0807_03	4.07	102
BLANK WG736090	AIRMS1	0807_04	4.1	103

BFB --1,4-BROMOFLUOROBENZENE

True Value: 4 ppb Limits: 60 - 140

